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AND COUNTRY LIFE.

EDITED BY CASPAR WHITNEY

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DEMDING

"HE STRODE FORTH INTO THE OPEN, * * * HIS GIANT HEAD PROUDLY UPLIFTED."

OUTING

VOL. XXXVII.

OCTOBER, 1900.

No. 1.

A TREASON OF NATURE.

By Charles G. D. Roberts.

THE full moon of October, deep orange in a clear, deep sky, hung large and somewhat distorted just over the wooded hills that rimmed the lake. Through the ancient forest, a mixed growth of cedar, water-ash, black poplar, and maple, with here and there a group of hemlocks on a knoll, the light drained down confusedly, a bewildering chaos of bright patches, lines, and reticulations amid breadths of blackness. On the half-overshadowed cove, which here jutted in from the lake, the mingling of light and darkness wrought an even more elusive mystery than in the wood. For the calm levels just breathed, as it were, with a fading remembrance of the wind which had blown till sundown over the open lake. The pulse of this breathing whimsically shifted the reflections, and caused the pallid water-lily leaves to uplift and appeal like the glimmering hands of ghosts. The stillness was perfect, save for a ceaseless, faintly rhythmic h-r-r-r-r-r-ing, so light that only the most finely attentive ear, concentrated to the effort, might distinguish it. This was the eternal breathing of the ancient wood. In such a silence there was nothing to hint of the thronging, furtive life on every side, playing under the moonlit glamour its uneven game with death. If a twig snapped in the distance, if a sudden rustle somewhere stirred the moss—it might mean love, it might mean the inevitable tragedy.

Under a tall water-ash some rods back from the shore of the cove there was a

sharp, clacking sound, and a movement which caused a huge blur of lights and shadows to differentiate itself all at once into the form of a gigantic bull moose. The animal had been resting quite motionless till the tickling of some insect at the back of his ear disturbed him. Lowering his head, he lifted a hind leg and scratched the place with sharp strokes of his sprawling, deeply cloven hoof; and the two loose sections of the hoof clacked together between each stroke like castanets. Then he moved a step forward, till his head and fore-shoulders came out into the full illumination of a little lane of moonlight pouring in between the tree-tops.

He was a prince of his kind, as he stood there with long, hooked semi-prehensile muzzle thrust forward, his nostrils dilating to savor the light airs which drifted almost imperceptibly through the forest. His head, in this attitude—an attitude of considering watchfulness—was a little lower than the thin-maned ridge of his shoulders, over which lay back the vast palmated adornment of his antlers. These were like two curiously outlined, hollowed leaves, serrated with some forty prongs; and their tips, at the point of widest expansion, were little less than six feet apart. His eyes, though small for the rough-hewn bulk of his head, were keen, and ardent with passion and high courage. His ears, large and coarse for one of the deer tribe to possess, were set very low on his skull—to such a degree, indeed, as to give somehow a daunting

touch of the monstrous to his massive dignity. His neck was short and immensely powerful, to support the gigantic head and antlers. From his throat hung a strange, ragged, long-haired tuft, called by woodsmen the "bell." His chest was of great depth, telling of exhaustless lung power; and his long forelegs upbore his mighty fore-shoulders so that their gaunt ridge was nearly seven feet from the ground. From this height his short back fell away on a slope to hind quarters disproportionately scant, so that had his appearance been altogether less imposing and formidable, he might have looked grotesque from some points of view. In the moonlight, of course, his color was just a cold gray; but in the daytime it would have shown a rusty brown, paling and yellowing slightly on the under parts and inside the legs.

Having sniffed the air for several minutes without discerning anything to interest him, the great bull bethought him of his evening meal. With a sudden blowing out of his breath, he heaved his bulk about and made for the waterside, crashing down the bushes and making, in sheer wantonness, a noise that seemed out of keeping with the time and place. Several times he paused, to thresh amid the undergrowth with his antlers. Reaching the water, he plunged in, thigh-deep, with great splashings, and sent the startled waves chasing each other in bright curves to the farther shore. There he stood and began pulling recklessly at the leaves and shoots of the water-lilies. He was hungry, indeed, yet his mind was little engrossed with his feeding.

As a rule, the moose, for all his bulk and seeming clumsiness, moves through the forest as soundlessly as a weasel. He plants his wide hoofs like thistle down, insinuates his spread of antlers through the tangle like a snake, and befools his enemies with the nicest craft of the wilderness.

But this was the rutting season. The great bull was looking for his mate. He had a wild suspicion that the rest of the world was conspiring to keep him from her, and therefore he felt a fierce indignation against the rest of the world. He was ready to imagine a rival behind every bush. He wanted to find these rivals and fight them to the death. His blood was in an insurrection of madness, and suspense,

and sweetness, and desire. He cared no more for craft, for concealment. He wanted all the forest to know just where he was—that his mate might come to be loved, that his rivals might come to be ground beneath his antlers and his hoofs. Therefore, he went wildly, making all the noise he could; while the rest of the forest folk, unseen and withdrawn, looked on with disapproval and with expectation of the worst.

As he stood in the cool water, pulling and munching the lilies, there came a sound that stiffened him to instant movelessness. Up went his head, the streams trickling from it silverly; and he listened with every nerve of his body. It was a deeply sonorous, booming call, with a harsh catch in it, but softened to music by the distance. It came from some miles down the opposite shore of the lake. To the great bull's ears it was the sweetest music he could dream of—the only music, in fact, that interested him. It was the voice of his mate, calling him to the trysting-place.

He gave answer at once to the summons, contracting his flanks violently as he propelled the sound from his deep lungs. To one listening far down the lake the call would have sounded beautiful in its way, though lugubrious—a wild, vast, incomprehensible voice, appropriate to the solitude. But to a nearby listener it must have sounded both monstrous and absurd—like nothing else so much as the effort of a young farm-yard bull to mimic the braying of an ass. Nevertheless, to one who could hear aright it was a noble and splendid call, vital with all sincerity of response and love and elemental passion.

Having sent forth his reply, he waited for no more. He was consumed with fierce anxiety lest some rival should also hear and answer the invitation. Dashing forward into the deep water, he swam at great speed straight across the cove, leaving a wide wake behind him. The summons came again, but he could not reply while he was swimming. As soon as he reached land he answered, and then started in mad haste down the shore, taking advantage of the open beach where there was any, but for the most part hidden in the trees, where his progress was loudly marked by the crashing and trampling of his impatience.

All the furtive kindred, great as well as small, bold as well as timorous, gave him wide berth. A huge black bear, pleasantly engaged in ripping open an ant stump right in his path, stepped aside into the gloom with a supercilious deferring. Farther down the lake a panther lay out along a maple limb, and watched the ecstatic moose rush by beneath. He dug his claws deeper into the bark, and bared his fangs thirstily; but he had no wish to attempt the perilous enterprise of stopping the moose on his love errand. From time to time, from that same enchanted spot down the lake, came the summons, growing reassuringly nearer; and from time to time the journeying bull would pause in his stride to give answer. Little flecks of foam blew from his nostrils, and his flanks were heaving, but his heart was joyous, and his eyes bright with anticipation.

Meanwhile, what was it that awaited him, in that enchanted spot by the water-side under the full moon, on which the eyes of his eager imagination were fixed so passionately as he crashed his wild way through the night? There was the little open of firm gravelly beach, such as all his tribe affected as their favored place of trysting. But no brown young cow cast her shadow on the white gravel, standing with forefeet wide apart and neck outstretched to utter her desirous call. The beach lay bright and empty. Just back of it stood a spreading maple, its trunk veiled in a thicket of viburnum and withewood. Back of this again a breadth of lighted open, carrying no growth but low kalmia scrub. It was a highly satisfactory spot for the hunter who follows his sport in the calling season.

There was no brown young cow anywhere within hearing; but in the covert of the viburnum, under the densest shadow of the maple, crouched two hunters, their eyes peering through the leafage with the keen glitter of those of a beast of prey in ambush. One of these hunters was a mere boy, clad in blue-gray homespuns, lank and sprawling of limb, the whitish down just beginning to acquire texture and definiteness on his ruddy but hawk-like face. He was on his first moose-hunt, eager for a trophy, and ambitious to learn moose-calling. The other was a raw-boned and grizzled

woodsman, still-eyed, swarthy-faced, and affecting the Indian fashion of a buckskin jacket. He was a hunter whose fame went wide in the Settlement. He could master and slay the cunning kindred of the wild by a craft finer than their own. He knew all their weaknesses, and played upon them to their destruction as he would. In one hairy hand he held a long, trumpet-like roll of birch-bark. This he would set to his lips at intervals, and utter through it his deadly perfect mimicry of the call of the cow-moose in rutting season. Each time he did so, there came straightway in response the ever-nearing bellow of the great bull hurrying exultantly to the tryst. Each time he did so, too, the boy crouching beside him turned upon him a look of marveling awe, the look of the rapt neophyte. This tribute the old woodsman took as his bare due, and paid it no attention whatever.

While yet the approaching bull was apparently so far off that even eyes so keen as his had no chance of discovering the ambush, the younger hunter, unused to so long a stillness, got up to stretch his cramped legs. As he stood forth into the moonlight, a loon far out in the silver sheen of the lake descried him, and at once broke into a peal of his startling and demoniacal laughter.

"Git down!" ordered the old woodsman, curtly. "That bird tells all it sees!" And immediately setting the birchen trumpet to his lips, he sounded the most seductive call he knew. It was answered promptly, and this time from so near at hand that the nerves of both hunters were strung to instant tension. They both effaced themselves to a stillness and invisibility not excelled by that of the most secret of the furtive folk. In this stillness the boy, who was himself, by nature and affinity, of the woodland kin, caught for the first time that subtle, rhythmic hr-r-r-r-r-ing of the forest pulse; but he took it for merely the rushing of the blood in his too attentive ears.

Presently this sound was forgotten. He heard a great portentous crashing in the underbrush. Nearer, nearer it came; and both men drew themselves together, as if to meet a shock. Their eyes met for one instant; and the look spoke astonished realization of the giant approaching bulk. Then the old hunter called once more. The answer, resonant and vast, but al-

most shrill with the ecstasy of passion, blared forth from a dense fir thicket immediately beyond the moonlit open. The mighty crashing came up, as it seemed, to the very edge of the glade, and there stopped abruptly. No towering front of antlers emerged into the light.

The boy's rifle—for it was his shot—was at his shoulder; but he lowered it, and anxiously his eyes sought the face of his companion. The latter, with lips that made no sound, shaped the words, "He suspects something." Then, once more lifting the treacherous tube of birch-bark to his mouth, he murmured through it a rough but strangely tender note. It was not utterly unlike that with which a cow sometimes speaks to her calf just after giving birth to it, but more nasal and vibrant; and it was full of caressing expectancy, and desire, and question, and half-reproach. All the yearning of all the mating ardor that has triumphed over insatiable death, and kept the wilderness peopled from the first, was in that deceitful voice. As he ceased the call he raised himself stealthily behind the thick trunk of the maple, lifted a wooden bucket of water to the height of his shoulder, and

poured out a stream, which fell with noisy splashing on the gravel.

The eager moose could not resist the appeal. His vague suspicions fled. He burst forth into the open, his eyes full and bright, his giant head proudly uplifted.

The boy's large-caliber rifle spoke at that instant, with a bitter, clapping report, and a shoot of red flame through the viburnum screen. The tall moose neither saw nor heard it. The leaden death had crashed through his brain even before his quick sense had time to note the menace. Swerving a little at the shock, the huge body sank forward upon the knees and muzzle, then rolled over upon its side. There he lay unstirring, betrayed by nature in the hour of his anticipation.

With a sudden outburst of voices, the two hunters sprang up, broke from their ambush, and ran to view the prize. They were no longer of the secretive kindred of the wilderness, but pleased children. The old woodsman eyed shrewdly the inimitable spread of the prostrate antlers. As for the boy, he stared at his victim, breathless, his eyes a-glitter with the fierce elemental pride of the hunter triumphant.

THE DEVELOPMENT OF THE AMERICAN TROTTER.

By Nathan A. Cole.

THE trotting horse claims a royal ancestry, through centuries of breeding.

That the trotting gait is a natural one, and that trotters have existed ever since horses have been bred, is regarded now as a fact pretty well substantiated; but his actual historical development may be said to have commenced with the importation of the English thoroughbred, Messenger, by Thomas Bengier, of Bristol, Pa., in 1788. Messenger was called running-bred, and yet he inherited strong trotting instinct, and imparted it with remarkable regularity to all of his produce.

Crossed upon American mares, Messenger, by the close of the eighteenth century, had established a family with such notable trotting tendencies that there was

a great and rapidly increasing demand for his produce for carriage horses.

The desire for riches or renown caused many other English thoroughbreds to be imported early in the nineteenth century, in the vain hope of securing another Messenger; but to this day he is the only running-bred horse that ever was a progenitor of trotters on this continent. Messenger was by Blaze, he by Flying Childers, and he by Darley Arabian. His dam was by Turf, a descendant of Godolphin Arabian, showing backing of the strongest Arabian blood on both sire's and dam's side, through strains of the gamest running race-horse blood in history.

Messenger's sons, with scarcely a single exception, became distinguished as sires of trotters, including Mambrino,

Bush Messenger, Bishop's Hambletonian, and Ogden's Messenger. To these four great sons of Messenger the most important families of trotters trace their origin.

There are but six recognized trotting families—the Hambletonians, Mambrino Chiefs, Morgans, Stars, Clays, and Pilots.

The Hambletonian breed is the most extensive and the most popular. Nearly every great record-maker in our history traces to Rysdyk's Hambletonian, 10, the founder of this family. Hambletonian was foaled in 1849, and almost 90 per cent. of the performers of to-day trace to this greatest of sires. He was by Abdallah, 1, he by Mambrino, and he by imported Messenger. Hambletonian's dam was the Charles Kent mare, by imported Bell-founder, and her dam, old One-Eye, was by Bishop's Hambletonian, son of imported Messenger. The dam of One-Eye was Silver-tail, by imported Messenger. Thus, Hambletonian traces directly to Messenger on his sire's side, and has a double infusion of that blood on his dam's side. At four years of age the Charles Kent mare showed a well-authenticated mile in 2:41. She was foaled in 1834, and her mile was exceedingly fast for that period: the fastest record up to and including 1837 being 2:35, made by the bay gelding Columbus, under saddle, in 1834, at Philadelphia. Up to the close of the year 1837 only twenty-seven horses had beaten three minutes.

In 1852, Hambletonian, when only three years old, trotted a public trial in 2:48. But his success did not commence until he was nearly twenty years old, when he commanded attention because of the prominence of his produce.

Up to that time his harem had been filled with all sorts of nondescripts, yet so wonderful was his power to transmit the tendency to trot that the pedigree of the mare mated with him seemed of little moment. The great Hopeful had no established breeding on his dam's side, nor had Marguerite, Lottery, Lady Augusta, Hamperion, nor had the dam of George Wilkes, that greatest son of Hambletonian.

The following table of champion trotters shows how the Hambletonian blood

predominates. The table commences with Dexter, for the reason that he was one of Hambletonian's youngest performers:

Dexter, 2:17¼, by Hambletonian; dam Clara, by American Star, 14.

Goldsmith Maid, 2:14, by Abdallah, 15 (son of Hambletonian); dam Old Ab, by Abdallah, 1 (sire of Hambletonian).

Rarus, 2:13¼, by Conklin's Abdallah (no doubt of Hambletonian blood); dam Nancy Awful, by Telegraph; grandam by Abdallah, 1 (sire of Hambletonian).

St. Julien, 2:11¼, by Volunteer, 55 (son of Hambletonian); dam Flora, by Harry Clay, 45, who carried the blood of imported Messenger.

Jay-Eye-See, 2:10, by Dictator, 113 (son of Hambletonian).



From a Painting, Copyrighted 1873, by W. E. Caldwell.
Goldsmith Maid.

Maud S., 2:08¾, by Harold (son of Hambletonian).

Sunol, 2:08¼, by Electioneer (son of Hambletonian); dam Waxana, by General Benton, by Jim Scott, by Rich's Hambletonian. Dam of General Benton, Lady Benton, by Gray's Hambletonian.

Nancy Hanks, 2:04, by Happy Medium (son of Hambletonian); dam Nancy Lee, by Dictator (son of Hambletonian).

Alix, 2:03¾, by Patronage, a son of Pancoast, and the dam of Patronage, Beatrice, is by Cuyler, a son of Hambletonian. Pancoast is by Woodford Mambrino, and his dam is Vicara, by Harold, a son of Hambletonian. Woodford Mambrino is a direct descendant from imported Messenger, through Mambrino Paymaster. The dam of Alix, Atlanta, is a daughter of Attorney, a son of Harold, and he by Hambletonian. Atlanta's dam is Flirt, by General Hatch, and,

through Cassius M. Clay, Jr., 22, the latter traces to Abdallah, 1, sire of Hambletonian. Harold is not only by Hambletonian, but his dam, Enchantress, is by Abdallah, 1, sire of Hambletonian.

Directum, 2:05¼, champion trotting stallion, is by Director, by Dictator, by Hambletonian; dam Stemwinder, by Venture, by Belmont, by Abdallah, 15, by Hambletonian.

William M. Rysdyk, of Chester, Orange County, N. Y., bought Hambletonian when still a suckling, for \$125, of Jonas Seeley, of Orange County. The latter had seen the old mare One-Eye trot very fast, and when he found her daughter, the Charles Kent mare, in an abused and dilapidated condition, with one hip knocked down and showing other marks of inhuman treatment, he bought her for a trifle. In 1848 he bred this mare to Abdallah, and the colt Hambletonian resulted.

Hambletonian lived until March 27, 1876. When he died he was buried on a high bluff near Chester, overlooking a beautiful and peaceful valley, his resting-place being marked by a handsome granite shaft appropriately inscribed. Not more than a half-dozen of his sons remain, and the youngest of these is now twenty-five years old.

The Clay family deserves prominence principally because of that stanch old race-horse and sire George M. Patchen, although Clay mares are well thought of among some breeders. They are nicely turned, as a rule, but they do not possess with sufficient strength those qualities of endurance and gameness which are necessary in the modern race- and road-horse.

The founder of the Clay family was Young Bashaw, by Grand Bashaw, an imported barb or Arabian. Young Bashaw's dam, Pearl, was by First Consul, and his grandam, Fancy, was by imported Messenger. The important representatives left by Young Bashaw were Andrew Jackson, Harry Clay, and Cassius M. Clay.

The Morgan family is descended from Justin Morgan, foaled in 1793, whose breeding has never been fully established, although the best evidence points to the fact that he descended from Lindsay Arabian. This breed of trotters has produced such grand performers and sires as Ethan Allen, 2:25½ (2:15 with run-

ning mate), and Daniel Lambert, from whom have descended many of the greatest performers, as well as many of the famous brood mares of the world.

The Mambrino Chiefs are descended from imported Messenger, through Mambrino Paymaster, a son of Mambrino, and whose dam was a daughter of imported Paymaster. This family is, next to the Hambletonians, the most important of the trotting breed, not only as a family of good race-horses, but for its extremely handsome animals.

Old Mambrino Paymaster's chief prominence is derived from the great producing qualities of his son Mambrino Chief, from whom descended Mambrino Boy, sire of Gussie Wilkes, who is the dam of the great young sire Allerton, 2:09¼, and Barnhart, 2:22¾. Mambrino Boy is also the sire of Lou, that produced Axtell (3), 2:12, who sold for \$105,000.

Mambrino Chief also sired those well-known producers—Mambrino King, the greatest show-horse among all the trotters and a sire of great prominence; Mambrino Patchen, through whom have come many of our most noted brood mares; Mambrino Pilot, Mambrino Russell, Mambrino Dudley, and many others of note.

George Wilkes, concededly the greatest son of Hambletonian, owes much of his success to crosses upon mares descended from Mambrino Chief, as witness the great Alcyone, Alcantara, Baron Wilkes, Ellerslie Wilkes, Guy Wilkes, Patchen Wilkes, Simmons, Wilkes Boy, William L., etc.

The family established by American Star, 14, has gained considerable renown. American Star, 14, was by a horse known as American Star, and his dam was Sally Slouch, by Henry; grandam by imported Messenger. The Star blood figures prominently in the breeding of Dictator, Dexter, 2:17¼; Artillery, 2:21½; Guy, 2:10¾; Jay Gould, 2:21½; Robert McGregor, 2:17½, and many other noted performers and producers.

The Pilot family is descended from Old Pilot, the Canadian pacer, whose breeding has never been traced, but who was, no doubt, a descendant of the original pacer. Pilot, Jr., 12, established the reputation of his family, which is great because of its production of renowned trot-

ters as well as pacers. Through him have descended Woodburn Pilot, Tattler, Bayard, Pilot Mambrino, etc.; but his greatest representative was Pilot Medium, by Happy Medium, and out of the old brood mare Tackey, by Pilot, Jr., 12. The Pilots are especially noted for their endurance and strength. As individuals they cannot be called handsome, being usual-

ers; dam Widow Machree, 2:29, by American Star, 14.

Dauntless, sire of 29 trotters and 3 pacers; dam Sally Feagles, by Clay, son of Cassius M. Clay, Jr., 20.

Dictator, sire of 45 trotters and 11 pacers; dam Clara, by American Star, 14.

Egbert, sire of 67 trotters and 18 pacers; dam Camptown, by Messenger Duroc (descended



From an Old Painting, Copyrighted by John L. Gihon.

Dexter, King of the Turf, Ridden by Budd Doble.

ly rather coarse of bone and not graceful.

From these great fountain-heads of the past have sprung innumerable auxiliary families with recognized representative heads. For instance, Hambletonian, while he left us only forty standard performers—all trotters—had, up to the close of 1899, 150 sons that had produced 1,457 trotters and 210 pacers with standard records (2:30 or better for trotters, and 2:25 or better for pacers); while Hambletonian's daughters have produced 108 standard trotters and seven standard pacers.

The following table shows Hambletonian's sons which have produced twenty-five or more standard performers, and incidentally the combination of blood which resulted in propagating so great a race:

Aberdeen, 2:46, sire of 48 trotters and 4 pac-

ers; dam Mambrino, by imp. Messenger); grandam Miss McLeod, by a son of Hambletonian.

Electioneer, sire of 157 trotters and 2 pacers; dam Green Mountain Maid, by Harry Clay, 45.

General Stanton, sire of 26 trotters and 4 pacers; dam by One-Eyed Kentucky Hunter.

George Wilkes, 2:22, sire of 72 trotters and 11 pacers; dam Dolly Spanker (untraced).

Happy Medium, 2:32½, sire of 88 trotters and 6 pacers; dam Princess, by Andrus's Hambletonian (son of Old Hambletonian).

Harold, sire of 40 trotters and 5 pacers; dam Enchantress, by Abdallah, 1 (sire of Hambletonian).

Jay Gould, 2:21½, sire of 26 trotters and 3 pacers; dam Lady Frank, by Mambrino Star (by Mambrino Chief, 11).

Masterlode, sire of 27 trotters and 1 pacer; dam Lady Irwin, by American Star, 14.

Strathmore, sire of 54 trotters and 29 pacers; dam Lady Waltermire, by North American.

Sweepstakes, sire of 38 trotters and 3 pacers; dam Emma Mills, by American Star, 14.

Victor Bismarck, sire of 28 trotters and 1 pacer; dam Hattie Wood, by Harry Clay, 45.

Volunteer (w), 2:37, sire of 28 trotters, 1 pacer; dam Lady Patriot, by Young Patriot.

Thus, it will be seen that American Star is a secondary factor in the breeding of the greatest producing sires in this early generation of the Hambletonian family, the Clay family coming next; while two of Hambletonian's sons are inbred.

Dictator, Electioneer, George Wilkes,



From an Old Painting.

Hambletonian.

Happy Medium, Harold, Strathmore, and Volunteer thoroughly sustained the honor of their illustrious sire, and each has established a family of great renown, and their sons and daughters are breeding on.

George Wilkes is by far the greatest of these. His sons (102) have produced 1,548 standard trotters and 638 standard pacers, while 90 of his daughters have produced 109 standard trotters and 39 standard pacers.

Electioneer ranks second, as 89 of his sons have produced 600 standard trotters and 148 pacers, and his daughters have produced 74 trotters and 10 pacers.

Happy Medium's 60 sons have sired 228 trotters and 85 pacers, and his daughters have produced 58 trotters and 22 pacers.

Dictator's sons have produced 158 trotters and 78 pacers. Harold's sons have produced 160 trotters and 70 pacers, and his daughters have produced 73 trotters

and 8 pacers. Strathmore's sons have produced 59 trotters and 64 pacers, and his daughters have produced 78 trotters and 34 pacers. Volunteer's sons have produced 141 trotters and 24 pacers, and his daughters 60 trotters and 11 pacers.

The cross which has produced a very large majority of the sires and dams of extreme speed is that of Hambletonian and Mambrino Chief. Space will not allow of details, but enough is shown herewith to demonstrate the facts:

The greatest son of George Wilkes, by the records, is Onward, foaled in 1875, who is the sire of 90 sons, who have produced 206 trotters and 158 pacers with standard records. Onward's dam, Dolly, is by Mambrino Chief, 11. Onward's sons have 114 trotters and 32 pacers in the standard list; his greatest producing son is Allandorf, and Allandorf's dam, Alma Mater (one of the greatest brood mares), is by Mambrino Patchen, a son of Mambrino Chief, 11. Onward's next greatest son, by the records, is Garnet Wilkes, and his dam is Kentucky Belle, by Harold, by Hambletonian; grandam Juliet, by Pilot, Jr., 12.

Red Wilkes, the next greatest son of George Wilkes, has 108 trotters and 37 pacers in the standard list, and his sons have 206 trotters and 151 pacers in that select list; while his daughters have produced 67 trotters and 27 pacers with standard records. The dam of Red Wilkes, Queen Dido, is by Mambrino Chief.

Other famous sons of George Wilkes are: Alcantara, with 90 trotters and 41 pacers to his credit; Alcyone, with 50 trotters and 9 pacers; Guy Wilkes, with 55 trotters and 6 pacers; Jay Bird, with 73 trotters and 6 pacers; Patchen Wilkes, with 16 trotters and 11 pacers; Simmons, with 73 trotters and 17 pacers. The dams of all these are granddaughters of Mambrino Chief, all being by that great sire of brood mares, Mambrino Patchen, except the dam of Jay Bird, she being by Mambrino Star.

Happy Medium's greatest son was Pilot Medium, sire of 87 trotters and 17 pacers with standard records. He is one of the isolated instances of greatness, even though, on his dam's side, he does not possess the breeding of royalty.

Dictator's greatest son is Director, 2:17, sire of 31 trotters and 11 pacers (in-

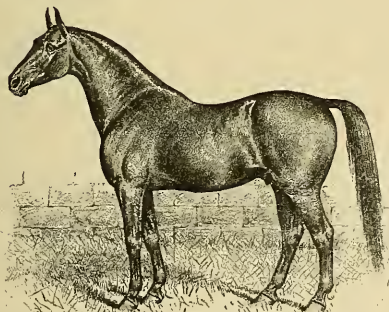
cluding Directum, trotter, 2:05¼, and Direct, pacer, 2:05½. Director's dam was Dolly, by Mambrino Chief.

Harold's greatest producing son is Hambletonian, 1644, sire of 21 trotters and 6 pacers, and his dam, Belle, is by Mambrino Chief. Harold's next greatest son is Lord Russell, sire of 22 trotters and 4 pacers, and his dam is Miss Russell, by Pilot, Jr., 12.

Strathmore's greatest son is Steinway, sire of 12 trotters and 20 pacers, and his dam, Abbess, is by Albion, 5514, he by Gen. Benton (descended from Hambletonian) and his dam Amy, by Messenger Duroc (son of Hambletonian). Albion's grandam is also by Hambletonian. Santa Claus, next greatest son of Strathmore, is out of Lady Thorn, Jr., by Mambrino (son of Ericsson, by Mambrino Chief).

Volunteer's greatest son is Louis Napoleon, sire of 23 trotters and 8 pacers, and his dam, Hattie Wood, is by Harry Clay, 45. His next greatest son, Landmark, sire of 21 trotters and 2 pacers, is out of Medora, by Eureka (son of Black Hawk, 24, by Andrew Jackson).

There is little doubt that if a table were to be made of all the more than 20,000 standard performers it would show that the Hambletonian-Mambrino Chief cross predominated; but, as evidence that it is the most valuable cross in the production of extreme speed, I have taken the twenty-one trotters that have beaten 2:08, and the table herewith shows that the inter-



From an Old Drawing by Permission of Walter T. Chester.
Mambrino Patchen.

mingling of the Hambletonian blood with that of Mambrino Chief has produced the ideal light-harness horse:

Alix, 2:03¾, by Patronage, by Pancoast, by

Woodford Mambrino, by Mambrino Chief; dam Atlanta, by Attorney, by Harold, by Hambletonian; grandam Flirt, by General Hatch, by



Photo by the Author.

Alix, Champion Trotter of the World.

Cassius M. Clay, Jr., 22, by Cassius M. Clay, 18, by Henry Clay, 8, by Andrew Jackson, 4.

Nancy Hanks, 2:04, by Happy Medium, by Hambletonian; dam Nancy Lee, by Dictator, by Hambletonian; grandam Sophia, by Edwin Forrest, by Young Bay Kentucky Hunter, by Young Highlander.

Azote, 2:04¾, by Whips, by Electioneer, by Hambletonian; dam Josie, by Hambletonian, 725, by Guy Miller, by Hambletonian; grandam Young Josselyn, by Speculation, by Hambletonian.

Directum, 2:05¼, by Director, by Dictator, by Hambletonian; dam Stemwinder, by Venture, by Belmont, by Abdallah, 15, by Hambletonian. Director's dam, Dolly, by Mambrino Chief; Belmont's dam, Belle, by Mambrino Chief.

Fantasy, 2:06, by Chimes, by Electioneer, by Hambletonian; dam Homora, by Almonarch, by Almont, by Hambletonian; grandam Sophia, by Almont, Jr., 1829, by Almont; Almont's dam by Mambrino Chief.

Bingen, 2:06½, by May King, by Electioneer, by Hambletonian; dam Young Miss, by Young Jim, by George Wilkes, by Hambletonian; grandam Miss Mambrino, by Red Wilkes. Miss Mambrino's dam, Miss Clark, by Alric, by Almont, whose dam was by Mambrino Chief; dam of Red Wilkes, Queen Dido, by Mambrino Chief.

Cresceus, 2:06, by Robert McGregor, by Major Edsall, by Abdallah, 15, by Hambletonian; dam Mabel, by Mambrino Howard, by Mambrino Chief; grandam Contention, by Allie West, by Almont. Dams of Allie West and Almont by Mambrino Chief.

Ralph Wilkes, 2:06¼, by Red Wilkes, by George Wilkes, by Hambletonian; dam Mary Mays, by Mambrino Patchen, by Mambrino

Klamath, 2:07½, by Morookus, by Altamont, by Almont, by Abdallah, 15, by Hambletonian; dam Bob, by Ophir. Dams of Altamont and Almont, by Mambrino Chief.

Arion, 2:07¾, by Electioneer, by Hambletonian; dam Manette, by Nutwood, by Belmont, by Abdallah, 15, by Hambletonian. Belmont's dam by Mambrino Chief.

Fred Kohl, 2:07¾, by Guy Wilkes, by George Wilkes, by Hambletonian; dam Mystic, by Nutwood, by Belmont, by Abdallah, 15, by Hambletonian; grandam Emma Arterburn, by Mambrino Patchen, by Mambrino Chief. Guy Wilkes's dam by Mambrino Patchen, by Mambrino Chief; Bel-

mont's dam by Mambrino Chief.

Kremlin, 2:07¾, by Lord Russell, by Harold, by Hambletonian; dam Eventide, by Woodford Mambrino, by Mambrino Chief; grandam Vara, by Hambletonian.

Ryland T., 2:07¾, by Ledger, Jr., untraced; dam May, by Ulverston, son of Lexington.

Twenty-five pacers have taken records below 2:05, and of these fourteen possess the speed-producing cross of Hambletonian and Mambrino Chief.

The laws of heredity are inexorable, and that "like produces like" is as inevitable as the coming of the morrow's sun. A well-bred trotter is a trotter because he traces, generation after generation, through an ancestry that has known nothing but trot. Therefore, his education is simply that of a well-bred child—the development of a naturally keen intellect, and the proper training of a naturally good disposition.

In early days no colts were ever trained, and the preparation of a matured horse involved many months of patient labor. A horse then might be called upon one day to go a race to sulky, the next under saddle, and the next to wagon. And, again, one race might be at mile heats, the next at two, three, or five miles, and often these were heats.

These frequent changes called for great endurance and gameness as well



From an Old Lithograph of Currier and Ives.

Lady Emma, George Wilkes, and General Butler over the Fashion Course, L. I., Sept. 28. 1865.

Chief. Red Wilkes's dam by Mambrino Chief.

Caid, 2:07¼, by Highwood, by Nutwood, by Belmont, by Abdallah, 15, by Hambletonian; dam Nikita Cossack, by Don Cossack, by August Belmont, by Hambletonian; grandam Friction, by Woodford Mambrino, by Mambrino Chief. Don Cossack's grandam by Mambrino Chief.

Kentucky Union, 2:07¼, by Aberdeen, by Hambletonian; dam Kentucky Central, by Balsora, by Abdallah, 15, by Hambletonian; grandam Nonesuch, by Brignoli, by Mambrino Chief.

Peter the Great, 2:07¼, by Pilot Medium, by Happy Medium, by Hambletonian; dam Santos, by Grand Sentinel, by Sentinel, by Hambletonian. Grand Sentinel's dam by Mambrino Chief.

William Penn, 2:07¼, by Santa Claus, by Strathmore, by Hambletonian; dam Lulu M., by Dauntless, by Hambletonian. Dam of Santa Claus, by Mambrino, by Ericsson, by Mambrino Chief.

Eagle Flanagan, 2:07½, by Eagle Bird, by Jay Bird, by George Wilkes, by Hambletonian; dam Lady Flanagan, untraced. Jay Bird's dam by Mambrino Star, by Mambrino Chief.

Jupe, 2:07½, by Allie Wilkes, by Red Wilkes, by George Wilkes, by Hambletonian; dam Annie Patchen, by Mambrino Patchen, by Mambrino Chief. Dam of Allie Wilkes by Allie West, by Almont. Dams of Allie West, Almont, and Red Wilkes by Mambrino Chief.

as speed. Whatever else may be said of the early American trotter, his gameness cannot be questioned, for he trotted great distances at a rate of speed seemingly beyond the limit of the finely bred animal of to-day, and he would finish his fifty or one hundred miles with that same predominating determination which has always shown the superiority of the American trotter over all foreign breeds.

While we have progressed rapidly and wonderfully in the production of extreme speed, I sometimes think it has been somewhat at the expense of those great qualities, endurance and gameness. Probably no horse living to-day would repeat the feat of Fanny Jenks when, in May, 1845, she trotted one hundred and one miles in 9h. 42m. 57s., drawing a sulky weighing almost 150 pounds over a track not to be compared with the fast trotting courses of to-day. Lady Suffolk's races were mostly at two- and three-mile heats. In 1841, she beat Dutchman two three-mile heats, at Philadelphia, in 7:40½, 7:56, the first heat being at an average of 2:33 5-6 to the mile. It is a well-authenticated fact that on one day she was driven twenty miles from her home to the track at Prospect course, Long Island, and then won a race of two-mile heats.

Back in the days of those great trotters whose fame and glorious achievements

were heralded from ocean to ocean, race-horses were good for from twelve to fifteen years of steady campaigning. Lady Suffolk trotted her fastest miles when she was past twelve years of age, and was successfully raced for fifteen years. Goldsmith Maid-trotted to a world's record of 2:14 when she was seventeen, and she trotted a mile in 2:14½ when she was twenty-one. She started one hundred and eighteen times from June 6, 1867, at Newburg, N. Y., when she took her first record of 2:24¼, to Sept. 27, 1877, at Toledo, Ohio, when she trotted in 2:21½. In one hundred and fifteen of these races she beat 2:30. Maud S. made her world's record of 2:08¾ when she was eleven years old, and her turf career was then ended by her retirement after her purchase by Mr. Robert Bonner. Tacony, 2:27, was foaled in 1844, and was winning races in 1861. Ethan Allen, 2:25½, was eleven years old when he took his record, and was raced successfully until he was seventeen years old. Flora Temple, 2:19¾, was foaled in 1845, and successfully raced until 1861; in July of that year she won a race against Ethan Allen and running mate, trotting the last heat in 2:20½.

However, "it is the pace that kills"; horses ripen earlier and fade earlier, for Sunol, at five years of age, beat all previous records when she trotted in 2:08¼.



From a Painting by W. F. Patwood, Copyrighted by Brewster & Co., 1860.

George M. Patchen. Lady Suffolk. Princess. Ethan Allen. Flora Temple.

and Nancy Hanks was only six years old when she made her meteoric campaign, which she closed with a record of 2:04. Alix was also only six years old when she trotted to a record of 2:03 $\frac{3}{4}$, the present world's trotting record.

Of Alix much could be said. "Sweet Little Alix," as she came to be known, is a small mare and could not have weighed over 650 pounds in racing condition. And yet, she was a bundle of nerves and possessed remarkable vitality and endurance. She was raced in 1890 as a two-year-old, taking a record of 2:30, starting six times; in 1891 she reduced her record to 2:16 $\frac{1}{4}$, starting thirteen times; in 1892 she reduced her record to 2:10, starting seven times; in 1893 she reduced her record to 2:07 $\frac{3}{4}$, starting seven times; in 1894 she secured the world's record of 2:03 $\frac{3}{4}$, starting twenty times; in 1895 she started seven times and was then retired. Her record of 2:03 $\frac{3}{4}$ was made against time, but she has a world's race record of 2:05 $\frac{1}{4}$, dividing honors with the stallion Directum.

Probably the greatest representative of the old-time race-horses we have to-day is Bert Sheldon, Jr., 2:16 $\frac{1}{4}$, by Warwick Boy. He was foaled in 1883, and is still "on the turf," having been started in races this season. His first race was in 1888, when he was five years old. He started ten times that year, and took a record of 2:40; in 1889 he reduced his record to 2:29 $\frac{1}{4}$, and started in eighteen races; in 1890 he reduced his record to 2:25 $\frac{1}{4}$, starting nineteen times; in 1891 he reduced his record to 2:20 $\frac{1}{4}$, starting twenty-five times; in 1892 he reduced his record to 2:16 $\frac{1}{4}$, starting twenty-one times; in 1893 he started twenty-one times; in 1894 he started only seven times; in 1895 he started thirteen times; in 1896 he started sixteen times; in 1897 he started eighteen times; in 1898 he started seventeen times; in 1899 he started seven times, making a total of one hundred and ninety-one races, a number greater than ever contested by any other horse, and he has also trotted more heats in 2:30 than any other animal.

Repeated efforts have been made to beat the record of Maud S., 2:08 $\frac{3}{4}$ to high-wheel sulky, but in these the greatest horses of late years have failed. Azote, 2:04 $\frac{3}{4}$, a large and powerful animal, failed, as did Alix. The same is true of

the record of Direct, 2:06 to high wheels. John R. Gentry, 2:00 $\frac{1}{2}$, could only trot in 2:07 $\frac{1}{4}$ to high wheels.

The record of Great Eastern, 2:15 $\frac{3}{4}$, under saddle, made in 1877, still stands, although frequently attacked, as does the record of Dutchman, 7:32 $\frac{1}{2}$, for three miles under saddle in 1839, and 10:51 by the same horse for four miles under saddle in 1836; the five miles in 13:16, by Fillmore, to wagon, in 1863; the ten miles in 29:04 $\frac{1}{2}$, by Julia Aldrich, to wagon, in 1858, and many other records up to the one hundred and one miles of Fanny Jenks.

It is a significant coincidence that in England during the end of the last century, and the first half of this, the trotting tests were for endurance combined with speed.

In 1782 Locksmith's gray mare trotted 72 miles in 6 hours. In 1792, in Lincolnshire, a horse under saddle, with 220 lbs. up, trotted 30 miles in 2 hours 10 minutes. In 1800 Phenomena trotted 17 miles in 53 minutes, straightaway, over the old Roman road between Huntingdon and Cambridge.

The most interesting long-distance match in England, however, was that against time by an American Galloway, Tom Thumb, in 1829. He trotted on the high road near Staines 100 consecutive miles in 10 hours 7 minutes to a wagon weighing 108 lbs. Each mile necessitated a turn and return, yet he was not the least distressed. This is borne out by the facts that the first 20-mile mare trotted in 1 hour 59 minutes, and the 10 miles between the eightieth and ninetieth in 52 minutes.

Because of these facts it seems to me that we have lost, to some extent, that stout-hearted horse of a quarter of a century ago, and in his place has come the very fast sprinter of to-day. And yet, perhaps it is the extreme speed that the horse of to-day is called upon to show that breaks him down early in life and makes it impossible for him to equal the long-distance performances of his early relatives.

The trotter of the twentieth century is a "kid-gloved" aristocrat, whom you could almost imagine denying kinship with his plebeian ancestors. He travels in a parlor horse-car to and from his engagements, and at home holds court in a handsomely decorated stall.

COLLEGE FOOTBALL TWENTY-FIVE YEARS AGO.

By W. J. Henderson.

THE pert undergraduate who reads the heading of this plaint will be apt to think, if not to say, "You fellows thought you were playing football, but you were asleep; there was not any football twenty-five years ago."

Football twenty-five years ago was played, and it was football played with the feet. That is, it was a game in which a football was chiefly kicked. The undergraduate, who, never having seen a game of college football of the vintage of 1875, is of the opinion that it was no good at all, is, like many other undergraduates talking on many other topics, passing judgment on something he knows nothing about.

Football was played in Princeton, which happens to be the university from which I hail, when I was a little boy. How long before that it was played there I do not know. The same game, however, was played at Yale, and at Columbia, and at Stevens Institute, and several other places.

It was not played at Harvard, where the modified Rugby game was introduced long before the other colleges took hold of it. Harvard is the mother of football as it is now played, and it was due to her persistent efforts that the game was introduced at Yale in 1875, and at Princeton in the autumn of 1876. The first game of Rugby football was then played at Princeton between two picked teams, one of twenty and the other of thirty men, and for some time after that the regular team for the game consisted of twenty men. Let me hasten to add that I think the present modified Rugby game is a better game than the old American college game. It admits of more systematic team play, of more various movements, of more intricate tactics. Furthermore, it takes bigger and stronger men to play it well. Therefore, it is a better game.

Previous to the autumn of 1876 the students of the New Jersey institution practiced only the old American college game. When I speak of this game to the omniscient undergraduate, if he does not utterly deny football's existence at that period, he at once tells me that he has

seen it played. "It's the same as the present American Association game, you know." That is what he tells me, and as I am incapable of imparting information to students, I hold my peace. But in these pages, which are read by grown men, I may speak without hesitation.

The old college game was a good deal like the American Association game, but it was not identical with it. And it was a good game, requiring skill, pluck, endurance, speed, and judgment. Furthermore, it was not, as the uninformed fancy, just a scramble, but admitted of systematic play and an appreciable amount of team work.

Its inferiority to the modern game was in the fewness of the possible combinations for team play, and the consequent limitation of the exercise of generalship. But it was a mighty lively game, and the kicking skill displayed in it would have driven a modern full-back into his grave with envy.

The ball, which instead of being oval was nearly round—in fact, a flattened sphere—was made of black rubber, cut in sections shaped like those of the cover of a baseball. There was no outer covering, and it was comparatively light. It was considerably larger than the Rugby ball.

I don't suppose that any of the boys of to-day are likely to try to kick one of these old balls, but it will do no harm to tell them how to do it. Punting was used extensively in the old game, and to punt one of these old balls successfully, you must kick it on its greatest circumference. If you turn the flattened circumference against the wind, the ball will simply soar into the air and not go ahead.

Drop-kicking was never systematically employed in the old game; but I occasionally used a drop-kick with success, and have seen others do it, for the purpose of deceiving an opponent into the belief that I was about to kick the ball off the ground, as was largely done in the game. The same rule as to the surface of the ball had to be followed in drop-kicking and ground-kicking. Look out for the key-hole. If you kick that, it will hurt.

So much for the ball. The game was

played with twenty men on each side. The aim was to drive the ball through the opponent's territory and across his goal, just as it is in the modern game. The dimensions of the ground I have forgotten, and I have no way of getting at them now; but it is my recollection that they were almost the same as they are in the present game. The goal-posts were erected in a similar manner, but there was no cross-bar. As kicking the ball along the ground was allowed, a goal could be scored by driving the ball between the goal-posts at any height, even on the earth. There was nothing to score except goals, consequently a goal counted simply one. Every time a goal was kicked the contesting teams changed sides, and the one scoring the larger number of goals won.

So far it all seems very simple to the football-player of to-day. But as soon as the game begins, everything is so different that he finds himself plunged into almost hopeless confusion. The first impulse of a modern football-player is to pick up the ball and run with it. In the old game a fundamental law was that you must not run with the ball. The old-fashioned fellow would either pick it up and punt it, or, if he saw an opportunity for a long drive, would kick it off the ground. Once I saw Phil King do that in a Rugby game with Yale, and I sent forth a yell which made the welkin ring. King's action threw confusion into the Yale ranks, and well it might. You were positively forbidden to carry the ball in your hands a greater distance than one yard. You must kick it, or else throw it upon the ground, causing it to bound; and by catching it again and bouncing it again you might advance it.

This was one method of retaining individual possession of the ball, for there was no such thing as one side having any special right to the sphere.

Another plan was to advance the ball by very short kicks along the ground in front of one, at the same time keeping off attacks by adversaries in much the same manner as a modern player blocks off. Of course, one's own side could assist in this. This was known as "babying" the ball. It could not be kept up long, because the opposing players would break through the interference. The player with the ball would then kick it toward

the opponents' goal. Thus you see that all thought of picking up the ball for the purpose of running with it was out of the question.

You have now acquired the rule that you must not carry the ball more than a yard. The next rule was that you must not throw the ball. Passing, as practiced in the modern game, would have been directly contrary to the rules of the old game. If you desired to pass the ball to a fellow-player, you had to bat it. Batting the ball was done with the closed fist. The ball was held up in the left hand and the right was swung at it with a motion almost the same as that of a good overhand throw in baseball. A good player could bat a ball almost as far as he could kick it. Short bats were used for passing the ball. Passing either forward or backward was allowable, for, as I shall presently show, there was no such thing as off-side play.

The next rule was that no player should take hold of another. No such thing as tackling was known in the old game. Of course, it was not necessary, because there was no running with the ball. But suppose the case of a player in possession of the ball, and either bouncing it ahead of him, or "babying" it along with short kicks. How might an opponent seek to stop him and get the ball? Here enters the beautiful science of butting. This was the ancient substitute for tackling. It consisted of running against a man and striking him with the shoulder, much in the same way as some modern players block off. To butt scientifically required a great amount of skill. A poor player was always more likely to hurt himself in doing it than to trouble his opponent.

Running at full speed, a player could butt another out of the game temporarily in the old days. A player with the ball was protected by his own side by the employment of the simple process of butting the would-be butter, for protective butting corresponded to the modern blocking-off in interference. You can easily see that it was a rough game; for, in addition to the butting, gentlemen's shins were kicked without any consideration.

Having acquired elementary information as to the rules of this old game, the reader will now understand how the play as a whole was conducted.

The teams consisted of twenty men

each. These men were chosen, first of all, for their ability as kickers and batters. About half of them had to be fast runners, and there were always two or three heavy men to do the necessary breaking through in a position which we shall soon see, and the rougher blocking-off.

The two sides lined up behind the center of the ground. The ball was placed on the ground in the middle, just as it is in the modern game, and kicked off. Once in a long time some strong and accurate kicker, like Henry Moffat, elder brother of Alexander, would succeed in kicking a goal from the "buck," as the kick-off was called. Such goals were allowed in the old game, for kicking was what we were out to do. But such a play was rare.

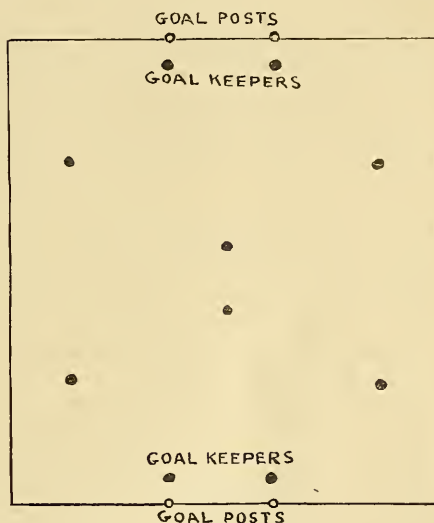
What usually happened was this. As soon as the ball was kicked off, ten men chosen for running and kicking ability, and known as the runners, followed the ball wherever it went, and endeavored by kicking and batting to drive it through the forces of the enemy and across their goal. The other ten men were position players, and they took up their positions on their own side before the "buck" and on the opposite side immediately after it. The diagram will show the manner in which we placed our position players at Princeton in my day.

Five men, arranged in a sort of kite shape, occupied posts on our own side, two of them being stationed immediately in front of our goal-posts, where they were charged with the duty of protecting the goal. They were called goal-keepers, and corresponded roughly to the full-back of the earlier days of Rugby football. Old players will remember that early full-backs did not play in conjunction with the half-backs, but stayed in the rear all the time, being used only for kicking. The goal-keeper never left his place further than was necessary to meet an advance of the ball in his direction.

Five other men were stationed on the enemy's side, in positions exactly the same as those used on our own side. These men were charged with the duty of opposing the enemy's position defense, and of advancing the ball past it. The enemy, it must be remembered, also placed position players on our side, so that our defense position players had their hands full. It was not the easiest thing in the world to play a cool game as

goal-keeper, with an opponent right in front of you all the time, eagerly waiting for a chance to send the ball past you.

The ball being kicked off, it was the aim of our runners to follow it as quickly as possible. The opposing player toward whom the ball went caught it, and kicked it back as far as possible. If, however, the enemy's runners were directly in front of him, and his kick was in great danger of being blocked, he would either kick or bat the ball to one of the position players stationed to one side, and that player would pass it along to another position player further toward the enemy's goal.



Meanwhile, the defense would try every trick known to the game to block every kick or bat, or to get the ball away from the player in possession of it.

As men were constantly off-side, there were many ways of spoiling a kick besides blocking it. If a player picked up the ball for the purpose of punting it, an opponent would sometimes dart in under his arm, just as he dropped the ball for the kick, and catch it before it reached his foot. Again, it was a common trick to butt a player just as he was about to kick the ball, either off the ground or by punting. Sometimes the butter would be foiled by a neat pass, the ball going from the man about to be butted to another of his own side. Again, the would-be butter was frequently butted himself just as he was about to spoil a kick.

Goal defense was reduced to a science. If the ball came straight at the goal, followed, as it was sure to be, by the runners, the nearest goal-keeper would kick it across the goal to his partner, who would instantly pass it to the man diagonally off to one side, and he in turn would bat it to the man in the center of the ground. In this or a similar way the ball would turn the flank of the runners. Remember that all this had to be done in the very faces of the enemy's position players. It was not the same sort of football playing as you see to-day, but it was a game, and one which required skill and pluck.

If the ball went out of bounds, it was carried in fifteen paces. The runners of the two sides formed in two semicircles, and the ball was thrown up in the center by the umpire. It had to be thrown up not less than ten feet, and players were forbidden to touch it till after it had struck the ground. It was in this play that the heavy men were most useful. Our system called upon our heavy men to rush forward, just as the ball struck, and block off all opponents trying to reach it. Our own players jumped in behind the heavy men, and, securing the ball, sent it far into the enemy's territory.

This is about as clear an idea of the game as it seems to me possible to give to the modern player. The Association game, as now played by some clubs, with its use of the head and its complete absence of the old blocking and butting system, and its neglect of the powerful batting, is not very much like it.

The kicking in our old game was full of science. In the first place, the kicking of a ball off the ground when the ball is rolling is not so easy as it looks. You must know just how to do it, if you wish to lift the ball high enough to prevent its being blocked, and at the same time to drive it forward a good distance. A good kicker in my day had to know how to kick equally well with both feet. If you were running diagonally toward the left side of the ground, bringing the enemy's goal on your right hand, you could not do anything with your right foot, but with your left you could make a strong side-kick toward the goal. This side-kicking was one of our strong points. A man who could not run diagonally to-

ward his own goal and kick a ball back toward the enemy's, was not of great use in the game. Punting had to be done in all directions, and not infrequently a smart player, while avoiding the attack of an opponent, would kick the ball directly backwards over his own head. And there were players who could kick a ball on the fly. What man in my class can forget the unerring accuracy with which "Reddy" Fulton used to kick a punted ball before it reached the ground? Though let me add in explanation, that it was far easier to kick the old ball than it is that in use to-day.

And so we played the old college game a quarter of a century ago. Dodging, bending, twisting, turning, always with keen eyes watching our own position men and at the same time keeping track of the enemy's players and the ball, for fifteen minutes at a time our runners would continue sprinting, like hounds in the traces of a flying fox, from one end of the ground to the other. And also dodging, twisting, turning, kicking sidewise and backwards as well as forwards, and ever and anon driving the ball swiftly with the unerring bat, we position players defended our own goal or threatened that of the enemy, till at length a clear opening offered itself, and an unobstructed, a long, low kick, or a whizzing bat, sent the ball through the goal space, and we all crossed over and found time to pull a few breaths and take account of bleeding shins or bruised bodies.

I must confess that, looking back, I think there was more in the old game than we ever got out of it. We could have developed the team play to a much finer point. But team play was not studied as deeply in my time as it is now, and football stars were expected to work wonders. But there was a great deal more team play than the moderns think we had, and there was far more science. As for pluck and endurance, the two games are about equal in their demands, but the modern rush-line tactics naturally call for stronger and larger men than our old running game.

I saw the beginning of the change from one game to the other, and while I am an ardent lover of the modern game, I do not like to think that our old sport is not held at its just value.

THE WOODCOCK AND HIS WAYS.

By Edwin Sandys.

THE all-round sportsman ever has a warm corner in his heart for the woodcock. No American game-bird is more beautifully marked, and no daintier morsel, properly served, could be placed before the most critical *bon vivant*. Some wise old rascal long ago said, "If the partridge had the woodcock's thigh—never a better bird did fly," but he did not say quite enough. He should have added, and his "trail" and his head, and his breast and his back, and everything that is his.

Its range includes the eastern United States and Canadian provinces, westward to Dakota, Kansas, etc. The bird moves northward very early in ordinary seasons. I have seen it in western Ontario during the first week of March, and I have reason to believe that during extremely mild winters, which occasionally occur in western Ontario, all the cock do not go south, a few hanging about sheltered springs. In such spots the trifling frosts of an open winter have little or no effect, and the cock has to endure at most but very few days when a plentiful supply of food is not obtainable. Its food is worms. Though it is possible that certain larvæ and grubs may lend variety to its bill of fare.

The popular error that the bird lived by suction may be readily explained. The bill is very long, and is equipped with nerves which render it extremely sensitive at the tip—so sensitive that the worms are located by the sense of touch, and, as I believe, sometimes by the sound of their underground working.

When the bird is feeding in the rich, soft mud, the bill is thrust in its entire length; the sensitive, flexible upper mandible first feels, then seizes, the worm, and the process is repeated as long as the supply holds out.

The signs of feeding-places having been used are clusters of small holes (such as would be made by a thin twig repeatedly thrust into the mould), and the droppings of the bird. The freshness of these signs tells the sportsman much that he wants to know.

There are circumstances occasionally

when the bird does not have to take the trouble to bore. On damp nights and after smart showers the biggest and fattest of worms come to and near the surface. When they so come, the cocks know right well what to do to them. Most of us have seen the robins at work upon a lawn after a shower, and can judge what a picnic a woodcock has with his longer reach, his insatiable appetite, and his ability to work day and night, for he is more or less nocturnal in his habits.

Far more frequently than most people imagine, cock pay nightly visits to lawns and gardens, even within the limits of great cities. I have flushed them from boulevards and lawns, and heard them rising or passing more times than I can now enumerate.

Once a wise old chap told me of still another method of the cock to get his favorite dish, and that was by dancing upon the ground and tapping it with his bill to induce the worms to come up; probably there is some reason in this. A scheme of my boyhood days may help to explain it. Long ago one of the problems which confronted me was the securing of the greatest number of worms with the least possible amount of digging. Lots of worms were needed, and I was not allowed to dig up the richest ground, for reasons good. We had, for instance, a beautiful lawn where they were abundant after rain, yet, of course, digging was out of the question. Even when the dog-days came, however, I could get plenty of worms by sprinkling a certain bit of that sod with a hose or a sprinkling-can. It brought the worms up. There were times, however, when I could not get hold of hose or garden sprinkler; then I carried pails of water to wet the sod, and tapped it all over with a light switch—the more tapping the better. This would bring worms to the surface later on, and about midnight, and perhaps again before dawn, I would go out with a light and gather them.

If, as the old man said, the cock dances and taps the ground, it can only be to imitate the fall of rain-drops, which brings the worms within reach. It seems

quite reasonable, and the cock may be a fake rainmaker in disguise. The woodpecker raps to alarm a hidden quarry and then listens to hear it move; the cock may do the same thing to imitate the patter of a summer shower.

The eye of the woodcock can hardly fail to attract the attention of even a careless observer. It is very large, dark, and lustrous, and is set very high and far back in the big skull. In this instance, as is her custom, nature works with a definite purpose. The size and several other peculiarities of the eye admirably fit it for use in twilight and even darkness, while its position in the skull serves the double purpose of keeping it out of the mud while its owner is boring, and enabling the bird to keep a lookout to the rear and above while feeding.

Specimens show marked variation in size and weight, and, as is the case with the birds of prey, the female is the larger. The usual difference in lengths is at least an inch, while the weight varies according to the condition of the bird. The heaviest female I have ever scaled weighed plump eight ounces. This one was so large that she at once attracted attention, and the weighing was carefully done. I have heard of much larger ones, but I suspect that these may have been European birds which had been shipped here dead.

The note of the woodcock has been the subject of much discussion. He does his courting in April, when he attempts to sing. One of his notes is a nasal *punt*, uttered while the bird is on the ground, and apt to be followed by a beautiful upward flight, varied with sweeping curves and plummet-like dives (*à la* night-hawk). During these movements he appears to utter a twittering whistle. This is caused by the action of the primaries of the wings, although many well-informed sportsmen declare this sound to be vocal. The female when disturbed from her eggs, or when in fear for her young, occasionally makes a peculiar quacking sound. I have heard this only twice, and I cannot recall that it has been mentioned by recognized authorities.

The nests which I have seen were composed of a few dry leaves in a slight depression. The eggs are four, large and pear-shaped, mottled with shades of brown upon a buff ground. The young

are queer-looking, delicate little things, but beautifully marked with rich brown and buff. They can run a bit as soon as they are dry, but I have never seen them exhibit any of the nervous dash and ability to conceal themselves, so characteristic of young quail.

When driven from her young the female seldom goes far away. I have heard her utter a low quack or bleat, and have seen her simulate lameness and give a clumsy imitation of the actions of a wounded bird. This, of course, to draw the intruder from her precious progeny. The young will run and hide, and if the observer be crafty and conceal himself near-by, he may witness a touching exhibition of mother-love. She will return ere long, and she *may* carry her babies to a safer spot. This has been disputed, but I have seen her grasp her young apparently between her thighs and carry them over a low fence. Something about her movements on the wing reminded me of a shrike carrying a quarry, yet I do not think her feet grasped the young one. Her flight was entirely different from the usual bat-like action, being slower and labored.

The real season for cock-shooting at its best comes when the magic of the Indian summer fills the air; when days are windless and cloudless; when sumacs and maples flare like the council-fires of the Lost Race dimly seen through wreaths of scented smoke; when big drops spangle the new fall grass as the fleet pointer stretches away in a breezy gallop before settling down to the serious business of the morning.

We are early astir, Don and I, and we travel fast and straight across country for full three miles. We know where we are going to, and we confidently expect to find the big-eyed king of the copse in a succession of scattered thickets which extend for miles ahead.

There was a heavy white frost last night, and the misty air is wondrous pleasant. All night long over-ripe apples solemnly thumped the ground, and occasionally faint bird-voices told of wee migrants hurrying south.

Half the leaves are down, and gaudy flakes of gold and scarlet silently drift through shade and shine to at last spangle the sod with flecks of glowing color.

Through snarly haw-trees and briery

fences, small songless birds are searching and flitting, loafing southward. Sparrows jig in and out along snake-fences; a tired-looking brown butterfly tacks above the dusty roadway, and in a grove we hear the sharp spat of a nut falling upon a curling leaf; the low, musical "link-up-link-em-up" of a crafty jay; the grunt of nuthatches, and the soft clash of half-dried foliage as some squirrel ends a flying leap.

Out again into the open, where a vast

across the pasture he halts and stands waiting as though to say, "No use what-ever beating this bit—what *are* you after, anyway? There was a rabbit in a stump back yonder, but you licked me last time for merely wanting to say hello to a rabbit."

Poor dogs!—they must frequently be sorely puzzled by their master's inexplicable vagaries. But a wave of the hand does wonders. He wheels and slants away, his pliant muscles bearing him like



Female Carrying Young.

flock of blackbirds slides like a river of ink over a page of blue, and, at length, across a sod-pasture to where a narrow line of slim maples and a snarl of lower growth mark the old-time course of a now defunct stream.

For more than an hour Don has been puzzled. Stubble to right and to left, yet never a signal to beat them out, though he *knows* quail should be there. Half way

a wind-driven thing over such easy footing. Longer and longer grow his strides, and higher and higher rises his shapely head, until at last he is at top speed—the perfection of smooth, free action, the model of high-bred grace.

"Oh, you beauty! if you didn't have that nose in front of you, you'd frighten me," thinks his delighted owner; then he whistles a single piercing note from

the metal thing between his teeth. At the sound the dog's head turns just enough to let him see a waving hand, and in obedience to the signal he sweeps in a grand curve up into the wind and away on the opposite tack. He is headed from the thicket now, and he looks for signals. He sees the hand raised high, and he at once slackens speed and turns in, full of the delight of his run.

A low cluck and a wave of the hand presently set him going again, this time toward the thicket. A low purring whistle conveys his final instructions, and he knows. "It's cover, after all," he thinks,



American Woodcock.

as he slows to a business-like canter and sags off to leeward, so that he may strike the thicket at precisely the best spot. The canter changes to an easy trot; it is woodcock, and quail methods will not do. The trot becomes slower and slower, and finally he fairly melts into the cover, a wiry frond of sumac brushing his back as he enters.

Now, if he were Gordon, or Irish, or liver-colored Bob, he might stand where he is for many minutes before I could make him out. Not so when that form, white as though carved in marble, halts in the red gloom of sumacs. The one mark on him is his lemon head—that is lost to view; but the white is as distinct as well could be—a marked, or rather an unmarked, advantage in cover.

So abrupt is his halt that the growth has hardly closed behind him, but there is no cause for worry. He is not so fond of woodcock as he is of quail, but the scent is too strong for mistakes on his part; so he stands there rigid on all four feet, the only sign of life about him being the slowly closing and parting jaws as they muffle and measure the erstwhile noisy panting.

A trickling whistling, a flip-flap, a pulsing of painted leaves, the dull "squinge" of a smokeless shell, a rustle as the dog goes down, and I am staring wildly at nothing. Quick as the shot had been, I had felt that indescribable thrill which unerringly tells one when he has held right, but no soft thump upon the ground had told of clean work, and no vision of a departing cock had asked for the second barrel. I was somewhat mystified.

The dog sprang up at the word and began close quest for the dead. He searched where the bird should have been and all about, but found nothing. It was queer, and I hated to go on. Don settled it by suddenly rising upon his hind legs and sniffing vigorously. Twenty feet above him, hanging with its big head fast in a crotch, was my bird—needless to say, stone-dead. It proved to be a female, and an unusually large one.

That shot must have been heard round the woodcock world, for it seemed as though all the cock in creation had congregated within hearing. For half an hour I did little more than edge my way along that cover, the dog meanwhile practically *walking* from dead bird to fresh point. Two guns to properly guard the open either side might have totaled perhaps fifty birds. Never had I seen the like, although I had been in some hot corners.

Let the reader who is accustomed to bagging a few straggling birds now and then, imagine a strip of cover, perhaps two hundred yards in length, in spots so thin as to be merely a fringe, elsewhere nearly an acre broad, and very dense. All about it are open fields, and beyond them, upon three sides, masses of woodland. Granted a perfect day, good light, and what sportsman could ask for more?

For a time the birds—and bear in mind they were strong and swift in the full vigor of autumn—darted with whistling

speed up and down the cover. Quite frequently there were two, and once three, birds up at the same moment. It was very like a small bit of the Happy Hunting Grounds. Never did the small gun work faster or better. And Don—peace be to his ashes!—behaved like the princely gentleman he was. All points were alike to him. The execution was deadly enough to keep him as steady as a clock, and he marched from point to point with a firm confidence, and a decision which did me good to see. Twice I was lucky enough to score rapid doubles. The first time it happened Don made no comment, but the second time he eyed me in a most peculiar fashion. I am not quite certain what was in his mind, but it almost seemed as though he suspected that I had suddenly become possessed of a devil, or that some *good* shot had stolen my clothes and outfit.

But, be that as it may, we had rare fun, and I completed the final beat with all the hauteur of a man who owns a dog that knows more than himself and a gun that can occasionally pump lead straight in spite of human clumsiness and maple obstinacy. During the heat of the action missed birds and other had sped toward the woods, and to pick up a few of these was the next important business.

When the last beat had ended, dog and man sat down together to enjoy the crowning moment of a happy day. The big nose resting upon my knee sniffed and sniffed of the incense floating from laden pockets, while eyes glowed with love and expectancy. The pipe was filled once more, and then one by one the birds were brought forth for a final examination and a general smoothing. And such birds! fat, pink-breasted, tortoise-shell-backed fellows, and every one a dainty to be placed before a king.

The very finest woodcock are to be found about the time of the turning of the leaf, and at this season the best places are fields of standing corn and perfectly dry maple thickets. Birds may be about such grounds until the first severe frost, and never forget that a thicket which draws blank to-day may within twenty-four hours contain a dozen birds. After a steady, warm rain has beaten down most of the leaves, the first sunny morning should be good. A big thicket at the edge

of a wood, or a clump left standing in a pasture, should be carefully investigated. In such places an odd ruffed grouse, too, may be looked for.

Parts of Pennsylvania, Northern and Western New York, and many of the Thousand Islands should afford fine shooting during that vague week when the southward movement is at its height.



European Woodcock.

The exact time can only be determined by some one upon the ground, as conditions vary each season. Summer shooting I know to be very fair in Pennsylvania, and I have a strong suspicion that some of those old hills could tell stories of a later and more abundant flight. The Canada side of St. Lawrence I know to be good, and the same may be said of parts of Quebec Province. The beautiful Niagara Gorge usually offers a few days' sport; and I have already told something of Western Ontario, of which Kent and Essex counties are perhaps the best. In these the quail and late cock-shooting come together, and one is apt to drive quail into cover which contains cock. When shooting over that country I make it a rule to send the dogs through every *dry* thicket on the chance of finding cock, and he who follows this plan will of a certainty some day meet his reward and enjoy a bit of sport with the long-bills that he will never forget.

A REMINISCENCE OF THE RISTIGOUCHE.

By E. J. Myers.

THE Ristigouche is a river of reminiscences that linger in every ripple and abide in every pool—of memories that never roll down to the sea with the passing of the waters.

It is a majestic stream, with quiet, serene waters and placid reaches, for, save where the mountains, closing to gorge and pass, form short, turbulent, noisy rapids, or where the intervalles widen the stream into rippling shallows, the river passes to the Gulf without a single fall. No tales of disaster attend its course; no graves of lost ones, forever sleeping afar from home, sadden point or woodland; no story of want and privation takes a deeper tone from the winds moaning in the pines.

Through the soft, warm atmosphere, laden with the fragrance of cedar and pine, of peak and crag, the perfume of violets and bell-like flowers of marge and intervalle, the song of the habitant's bird rings plaintively, "*Pitiez moi — pitiez moi.*" Time and time again the splash of salmon, sportively leaping in the pools, finds woodland echo in the sweet, sympathetic notes of Lost Kennedy, calling, "Sweet weather, sweet weather."

In the soft wash of the creek, where thick alders and overhanging boughs create grateful shade, moose and deer seek refuge from the heat and flies.

In the murmuring of the waters the faint cleavage of the paddles is unheard, and the canoe's presence is only known when it sweeps into sight, and a flash of reddish brown and crashing branches tells the story to wits slowly recovering equipoise.

In the "Valley of Music" lies the clubhouse of the Ristigouche Salmon Club, with broad, breezy verandas, where a shady nook may ever be found and the support for the rod is ever ready. As the smoke-drift from pipe or cigar breaks and the eye rests upon the rod, the angler will recall each particular battle that perpetuated itself in every twist or warp, just as the Indian notched his scalps upon the stick of his tomahawk, or the early settler put a nick in his gun-stock as a memento of vengeance.

Maybe as one sits there and looks out upon the flowing river he will recall the grizzled half-breed, who, with unparalleled skill, held the long, narrow pirogue—aye, that was a dug-out to shame any canoe which ever floated!—against the heavy rapids in the downward rush after the salmon as it wheeled in its flight, and, doubling the boulder, started up stream through the whirl and boil of the slide.

The slumberous old village is to-day, as it was a hundred years ago, a place of departure and return of the salmon anglers, and but for the iron rail and quasi-modern dress of half-breed and habitant, Matapedia might well claim the honors of Sleepy Hollow. Along this highway—short and scant from inn to water edge—the actor has paced, glad to forget the strut of the stage, its counterfeit humor, its pathos, and its tragedy; the merchant, content to abandon the struggle for gain; the lawyer and the doctor, eager to escape the worries that consume, and the theologian, longing to pass from altars built by man to the primal temples of nature.

Most deceptive, and exacting from the angler the exercise of the highest skill, is the not infrequent manner of the Ristigouche salmon taking the fly deep under the water, without a sign to tell what is taking place in the waters below, save the straightening of the line, often just as you are about raising the rod backward for another cast.

Take care! For that is followed by a sharp tug—a rise in the air (exhilaration)—the splash of the salmon (desperation)—a loose line and a straight rod—a salmon that cometh nevermore! (—n?)

Often the line straightens down the stream as if the Thing under the water were going back to the sea, and then it seems intent on running up the bank and climbing the mountain side quickly and dumfounderingly, and anon you have plenty of time for—whatever the monster of the deep might have been you must conjecture: never a sign is granted to let you know what it was, is, or might be.

It is a long reach, from Matapedia to

Tom-Kedgwick, and the waters are steep, and the way up is hard and laborious. Naturally, when the early habitants were dependent upon their own exertions the necessity of some boat adapted to ascend the waterway was apparent, and the long, slender, stiffened canoe, or the pirogue, hollowed or dug out of a tree, was evolved, with long, iron-shod, pointed poles—this could be forced smoothly and swiftly up the downpour of the river.

Then came the white man—eager for the salmon, and plethoric of purse.

The inextinguishable, ineradicable laziness, the utter aversion, intense hatred of the half-breed to labor, coupled with the "easiness" of the white man "to give up," evolved a solution which, as the days go by, you will surely realize was created only for the repose of the half-breed.

The Antiquary describing Edie Ochiltree hardly knew that he was vividly portraying the voyageur: "He is so far a true philosopher as to be a contemner of all ordinary rules of hours and times. When he is hungry he eats; when thirsty he drinks; when weary he sleeps, and with such indifference with respect to the means and appliances about which we make a fuss that I suppose he was never ill dined or ill lodged in his life."

For the voyage up we found *the solu-*

tion—constructed, on lines that scorn all ideas of symmetry and shapeliness, the flat. It aroused no dreams of chaste, severe lines of clipper or yacht, nor visions of picturesque argosy, lateened junk, or caravel. It was really difficult to give it a name, but as a talisman for good luck and an exorcism against evil things we finally called it "The Ship."

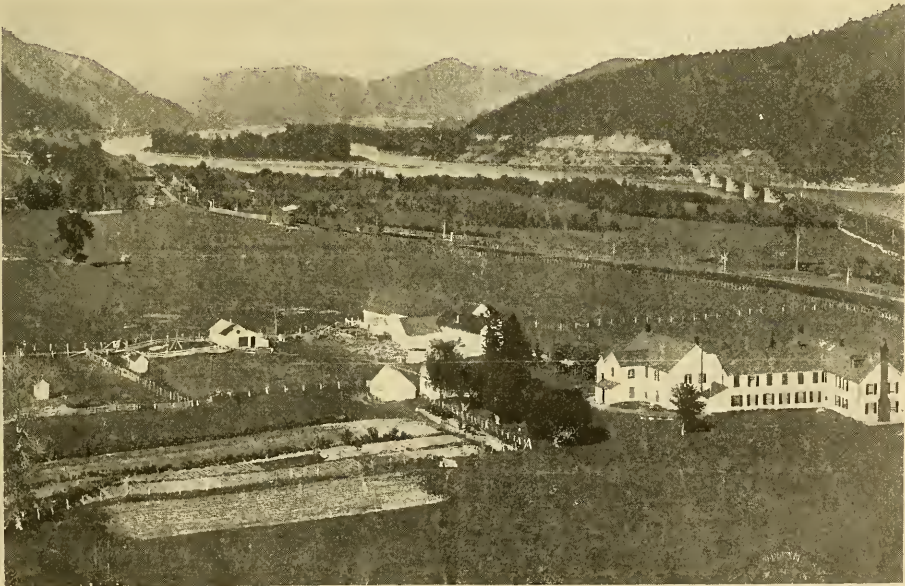
We could afford to abandon the plan of swift ascent and speedy reach of distant pools. "Time was made for slaves," and every one connected with "The Ship" was (temporarily, at least) a freeman.

Even the horses—who dragged, first themselves and then "The Ship" up the river—took their time (more or less yours), and pursued an even tenor of their way, equally keeping in tone with the nature and manner of the voyageur. So evenly and so leisurely that "The Ship" was content to make about a mile and a half an hour.

All aboard! Canoes, two on the roof—guides, four—dunnage, some—baggage, more—and provisions exceeding all needs.

Ahead is the driver, with the Horse Power tied to us by a long rope, and overhead, pacing to and fro, presiding over the rudder, is the Navigator into whose hands we commit our fortunes.

The cry "They're off" need excite no



In the Valley of Music. The Ristigouche Salmon Club House.

apprehension of danger from untoward haste or speed, for the considerate walk, well-timed and deliberately paced, of the Ristigouche horse is an inherited trait, or acquired from sympathy with the voyagers. Up the river wherever walking

Body. If ever a perfect refuge for the rehabilitation of body and mind—aye, and soul!—be needed, take the house-boat on the Main River.

"The Ship" is often the mail-carrier, for, *mirabile dictu*, it is speedier than the dispatch boat of the river guardian, whose readiness to have somebody else do his work is praiseworthy. The Royal-mail going up the river makes about twelve miles a day, and proceeds on the principle that evil news travels fast and good news is ever timely. Every dweller, sojourner, and angler hails "The Ship" for news, and the mail pouch is confidently handed to the examiner to take as he list and hand back what he please. There is no premium on honesty, and curiosity does not exist.

I had read the chronicle of a learned divine who, going up the Ristigouche, recorded that, casting with his light trout rod

from the forward deck of "The Horse Yacht," as it went upon the rapids, he caught two fine trout on one cast and landed them without calling a halt; so I carefully put up a trout rod to equal or surpass that record. I cast, and the flies with a swirl went down with a bend of the rod that made me bless my lucky stars and also those of the divine—a bishop he surely must be! As I struggled with my quarry, some cursory, absent-minded remarks of the Navigator of the house-boat, to the Lookout, about fool-killer—suction—made me finally realize that they were talking about me, and then—well, I succeeded in getting my flies out from under "The Ship" and prescribed liquid tongue-tie to the Navigator and the Lookout to buy their silence.

On her homeward way, flying down the current in poetic phrase, but in reality drifting upon the down stream in a "ship" like ours, we passed the wife of a well-known Metropolitan architect. Her face had a seraphic glow—she was self-absorbed and utterly oblivious to surroundings; but there was one on "The Ship" who knew what was the matter—a sort of telepathic intercommunication.



Fishing Lodge on Main River.

is easiest they take their way, never urged and never hurried, and as the team crosses the river from time to time as the shores and beaches change, they plunge in and creep out with the same equanimity of manner and even maintenance of pace.

Neither dread of shipwreck nor fear of sea-sickness disturbs our peace of mind as "The Ship" leaves her moorings high on the bank with many a creaking protest and groan, and takes her way up the stream.

The adage "more haste less speed" obtains in all its strength and has a religious force in these confines. Eat as often as you wish—sleep as long as you can—drowse in the sunshine when it is warm—hug the stove when it is cold—get out of the wet when it rains—no dress to excite envy for elegance, or rebuke for untidiness—no business to worry—no papers to read—no letters to write—none to answer—a paradise of sport before you—and the world behind, forgetting and forgotten!

If a shrine shall ever be built for the Poor-Priests of Trampdom, the house-boat of the Ristigouche will surely be adopted as the Temple of that Worshipful

The Navigator's hail passed unnoticed, and, further up the river, we learned that the day before the lady had killed a forty-three pound salmon, and, striking her tents, had at once started home to tell her husband.

Now, "the party of the first part" to my marriage contract (I fancy she is the "First Party" ever since) also worshiped the first salmon she killed—in a sort of ecstatic devotion that filled her soul and beamed out of her countenance for weeks. Anyhow, I have a photograph taken on the spot that affirms it beyond contradiction.

The last lodge below the Forks was passed, and upward we climbed the watery way to the Height of Land, till we reached our journey's end. Some who went through Canada that year will recall what a grand old rainy time they had and how precious little salmon they got. Likewise did we. But the tent-life was superb, and we were content to have the little salmon we got served in portions suitable for a Lilliputian appetite to keep us truly grateful, and trout *ad nauseam*! The great salmon lay in the pools, but would not rise to the fly—try as we would, regardless of time and labor.

I trust I am past the callow days of a Benedict—of fair repute, good standing, and with a wholesome respect for the "party of the first part"; but if you are liable to get an old reprobate of a *Salmo salar*, whose weight must be a ton—because you do not see him, and likewise do not get him—who takes the fly deep under the water without even a roll or ripple, and going to the bottom begins to jig, if your spouse be along, be sure to counsel with her in advance! Don't spare words—don't be chary of speech—but tell her all you ever heard and make up something to add interest! That is the time for Fancy to paint—later on it is attended with some personal risk—I mean quite some discomfort is likely to ensue.

You know what the Scotch gillie said to a husband, but it is not conducive to family harmony to repeat it to your con-

sort. Somewhere in William Black's writings (who never wrote a novel without a salmon-killing episode) you will find it. Leave it open, or mark it so that it will be seen—it may be a good plan—I tried it.

I can sermonize now because my experience happened with some other equally good things away back in '97 on the Tom-Kedgwick.

For "the Missus" came out in her canoe (two miserable half-breeds did it all) to offer sage counsel and assist, with salutary advice, to kill the sulking brute. You know that is just the time for valuable suggestions from somebody who is not holding the rod and can see it all—for sprightly, vivacious conversation, sparkling with repartee and badinage, especially with your better half. Her queries as to what is the matter? Is it a salmon? Why don't it jump?—run? What is it doing?—why, and what is it going to do? are so timely and pertinent that perforce must you answer each and every one of them! Just then your mind is free to give attention to just such inquiries. And you are always glad to show "the party of the first part" how much you know, as



"The Ship."

well as to impart the whole of it to her!

Your calm, deliberate statement that it is not a log—nor a sunken tree—nor the bottom—but a salmon—and a jigging salmon—is willingly followed (perhaps induced by a few judicious inquiries on

her part) by a lucid and elaborate dissertation from you on jigging as a fine art—*i. e.*, something in words which convey to her that the salmon is tugging at the fly

ly, so that the give of the rod is minimized, but the jigging goes on—likewise the questions.

You realize that it may only be an instant hence when the salmon may start and give you one fighting show, and then what complications will ensue if you are not on guard—keenly alert!

Well, the jigging stopped—so did the salmon, and so did I, and I got plenty of time to reel in the line and the fly. The “party of the first part” said, “Told you so!” I don’t know what I said—nor how long it took me to say it. I think it was to the other guides in the other canoe. I may have been talking a little strongly—a little loudly; but I didn’t stop until I felt it was cold—very cold!

It was “the party of the first part” freezing me. Maybe I should have counseled with “the party of the first part” before I started. That was where I made a mistake of which the salmon took advantage, but on the Ristigouche no disappointments last beyond the evening meal, for then is the feast of reason and the flow of soul. The tale and merry

until he tears it from his jaw, and surely it will succeed unless you can stop the indescribable motion that is vibrating up the line and shivering down the rod.

Her positive assurance that it is only the sawing of the line by the current, and that the fly is caught in the rocky bottom, impels you to give long but conclusive reasons for knowing that it is a salmon. You do not suffer your patience to be exhausted, nor your temper to be ruffled, by the demand that if the salmon is jigging, “Why don’t you let” the “party of the first part” “feel it,” just to show her that “you know better” than she does? In fact, that is just the occasion to make manifest that you are not nervous and have an abundance of leisure to discuss the situation—but of course you do not feel safe in giving the rod into her hands!

Meanwhile the other canoe is so conveniently near for continued discussion—your rod is strained as hard as desperation, and all your strength, and a reckless disregard of its pliant quality, will permit. Time illimitable passes, and your guides, acting with a just appreciation of the situation, get the canoe to a jutting point and hold it firm-

jest go round, and in the recital of other moving incidents by flood and field, the last traces of one’s own sporting infelicitities are obliterated.



Her First Salmon.



Changing Camp.

AWHEEL IN THE HEART OF OLD JAPAN.

By T. Philip Terry.

ONE of the most delightful cycling stretches on the Tokaido is encountered after leaving Yokohama along the classical shores of Lake Biwa, called the Lake of Omi by native poets for its fancied resemblance in shape to a Chinese guitar.

Next to the matchless cone of Fuji-no-Yama, Lake Biwa is nearest in sentiment to the Japanese heart, and many a tender song and plaintive native verse tells of its eight known beauties. The Biwa district is the Japanese Killarney, and the mountain ranges of Hiei-zan and Hira-yama, descending in silent slopings almost to the western shore, impart a lovely grandeur, even more impressive and picturesque than that suggested by the range of hills which guards Killarney's sides.

Though the old Tokaido stretches its circuitous length around the border of the lake, a somewhat modern ferry-boat speeds swiftly across and gives a more extensive view of the fairy islands, dotting in emerald splendor this dozen miles of tideless sea. The priests who dwell upon the islands strictly adhere to the Buddhistic principle respecting life, and foster and care for the myriad birds which make the islands their constant home. On any quiet evening during the breeding season of July and August countless thousands of cormorants and herons can be seen winging thitherward their flight, and the boat goes near enough to land for one to see the little world of nests pending peacefully from the branches of the pines.

With an eye to things practical as well as to the beauties of the lake, the Japs have tunneled a waterway eight miles in length directly through the hills, and, while shortening the transit from the Biwa district to Kyoto, this splendid head of water furnishes power to the Kyoto electric-light works, and to many mills and factories throughout the place. In following the Tokaido over the crest of the range, the abysmal air and light shafts of the tunnel occasionally appear. Deep down in their weird and grewsome depths heavily laden cargo junks drift quietly along, and the demon, holding the flam-

beaux high in air to light the way along this Eastern Styx, reserves an agile eye for vagrant clods and similar facetious visitations from above.

I awoke in Kyoto to the sound of the rain pelting a musical tattoo against the roof, and to my first experience with rainy weather since leaving Yokohama. If the Japanese, as has been said, make a pleasure of business and a business of pleasure, they certainly make light of the rain; for as I placed my moistened index finger upon the surface of the paper *shoji*, and looked through the temporary transparency into the sloppy street without, I detected no diminution of the swarm of life always observable in a Japanese thoroughfare. Instead of the straw *wara-ji*, or fair-weather sandal so popular in Japan, tall wooden *geta*, that raise the wearer some inches from the ground, are worn, and the noise and clatter as the people teeter along the street blend merrily with the pattering rain on the roof, and completely efface that feeling of tender melancholy which unwarrantably assails the biliously inclined on dark and rainy days.

Who has not seen a Japanese street on a rainy day has yet to see one of the most striking features of the native life. Like most primitive peoples dwelling near to nature's heart, the Japanese naturally turn to nature's bountiful hand in time of distress, and the makeshifts they devise to shield themselves from her maternal tears are as simple and effective as they are *outré* and picturesque.

On rainy days all Japan of the lower class turns out in rice-straw mackintoshes and home-made hats, and very much resemble exaggerated porcupines with the yellow quills *couchant*, as, with bare legs showing beneath the straggling fringe of mud-bespattered straw, they trot along the streets. This cumbersome rig serves the purpose of making them the most unhappy and woe-begone-looking wretches imaginable; even a bedraggled rooster would let down his snuggled leg and chuckle for joy at sight of them.

Knowing full well the *penchant* a Japanese sky has for raining and continuing

to rain when fairly started, and hopeful that the faint lightening of shade in the southern heaven means local rains here, but fair weather beyond, I adjusted my cycling rain-coat, and, looking very much

splashingly beneath. Bespattered lines of *rickshas* pulled by coated coolies with designating ideographs in the center of their backs; bobbing lines of white, yellow, and multi-colored bamboo parasols, and umbrella-less *musmees*, with squares of oiled paper folded over the head and knotted coquettishly beneath the chin; all poured by in an endless stream, giving me an amplitude of roadway as pleasing to me as it was doubtless satisfactory to themselves.

For fifteen miles south from Kyoto it was a grim and tasteless ride. The rain was now fortunately against my back, but continued to descend in slant-



The Neighborhood of Kobe.

like a turreted torpedo-boat with the paddle-wheels below, rode swishingly down the narrow streets to the sound of the rain and the splashing mud as they beat a friendly warning on my rubber-covered back.

Judged by the consternation I created, I am fairly forced to believe I own the dubious distinction of being the first cyclist who ever appeared in Kyoto's streets in such a rig. I recall one group of country dames, tramping along in the middle of the street beneath their bamboo umbrellas, with *kimonos* tucked up above their bare and pudgy knees, heedless of the rain, who scattered as if a dynamite bomb had dropped from the leaden skies upon them.

Overhead, on the Government telegraph wires, the rotund rain-drops ran slowly along their aërial and tenuous trolleys as if to secure a better view as I rode

ing sheets, fine and penetrating. A dull, harshly growling sky brooded sullenly over all. Dense leaden clouds, faced with a lightening of shade about their edges, shifted heavily, whipped hither and yon by the breeze, which banked them in heavy masses, only to tear them to shreds.

When I was but five miles out of Osaka the storm began to spend itself. The black-tiled roofs of the suburban houses, pushing their shining bulk above the surrounding trees, suddenly took on a tinted wave of green and gold. A rift, through which fell a ladder of sunlight, broke athwart the tumbling clouds; acres of gray vapor sped swiftly away; a mile of blue sea above smiled winsomely at the blue sea below, and Osaka was bathed in a halo of sunshine as I wheeled drippingly through the outskirts of the town.

The matutinal sun, flushed and caloric from its vertiginous rush across the Pa-

cific, but smiling and happy at being able to keep an early appointment with the Mikado's empire, is just making its appearance into Osaka from the east as I wheel southward from the city, pleased to be quit of it, with its narrow, bustling streets, its myriad smoking chimneys, and the buzz of its already whirling machinery; at once the most significant and the most incongruous spot on the island. Incongruous, because of the difficulty one experiences in reconciling the diminutive, artistic Jap with a big, lumbering building gorged with whirling, clanking machines, and pouring turgid clouds of Stygian smoke from its aerial chimney; and significant, because Osaka is to-day a living prophecy of what Japan will be within a short decade from now—a country dotted from Tappizaki to Kagoshima with mills and factories, ringing with the hum of a mill-ion spindles, echoing the music of contented workmen, and fairly in line with, to them, the wonderful genii of the Occidental world.

Although the intelligent Japanese are adopting Western usages in multitudinous ways, many of the people fondly cling to their antiquated ideas, and ere I am a mile from the Osaka limit, bowling merrily down the hill-environed valley, I am treated to an exhibition which aptly illustrates the above. From Osaka to Kobe is seventeen English miles. Following the railroad line and the Tokaido, the intervening country is comparatively level, flanked on one side by the ever-accom-

panying sea, and on the other—but a short distance away—by a serrated range of irregular hills that extend for many miles southward through the island. Osaka enjoys the distinction of supporting a very important rice exchange, and is also the base for the merchants of the hamlets and villages for leagues around. Ruling country prices are governed by Osaka, and quotations on the principal commodities—of which rice forms a conspicuous part—are daily heralded to the towns about by a wigwagging system.

The infiltration of Occidental ideas has so tinted the complexion of the Japanese treaty ports that an evolutionary tinge shows itself on the outskirts for miles around; and if the visiting cyclist were without map or idea of locality he could readily deduct the near-by presence of a



In Osaka's Entangling Streets.

shipping city by the hybrid customs and the general change in the natives he met along the road.

In the uncorrupted heart of old Japan, far from the contaminating influences of alien life, are found the true and primitive children of the land. Hospitable to

a fault, exquisitely polite, supremely indifferent to money and the luxuries it might bring, they are the fractional parts of Utopia almost realized. In some of the quaint interior villages, to offer money to your host in exchange for a simple but chivalrous hospitality extended during two restful days, is to call an expression to his oval face you are not likely to forget for weeks to come. Utopia capitulates to materialistic civilization, however, when you near the foreign towns. The innkeeper who has reluctantly accepted ten Japanese cents for supper, bed, breakfast, a refreshing bath, and a bit of innocent curiosity and goodwill that has warmed the cockles of your heart, changes into the shameless rogue who charges you a silver *yen* to ferry you across a stream just too wide to leap, too deep to wade, and too swift to swim with

safety. This varlet has been to the treaty port and seen the *Gwaiko Kujin* in all the wonder of his stranger clothes, and, in addition to the five days' wage referred to above, he will doubtless tell you that he is a Christian, and will expect in return for this your hat, shoes, or even your wheel before you escape his importunities.

As you near the sea-port towns after an Elysian spin through the gentle country and its shaded lanes, the tinge of foreign influence grates more harshly upon you. *Bizarre* scraps of European apparel appear in tawdry unseasonableness amidst the habiliments of the natives. A fuzless chimney-pot hat of the fashion of '61, a flowing *kimono*, and an ancient pair of well-ventilated rubber boots pulled over a sockless pair of feet, enhance the dubious beauty of a pilgrim who divides the roadway with me a few miles out of



A Bit of the Tokaido.

Kobe, and this is not the only jarring note in the otherwise pleasing landscape.

Kobe and its neighborhood are a veritable happy hunting-ground for lovers of the wheel. The settlement streets are irreproachable, while ridable country roads radiate toward sequestered shrines, fairy glens, pebbly beach roads, and circling mountain paths, where superb sea views, that bring involuntary exclamations of delight to the lips, are constantly obtained.

As in Yokohama, many of the foreign bungalows are perched on the back-ground of hills beyond the town. The local women cyclists do not take kindly to these inclines; and native coolies, with a rope secured to the steering-head, or a forked stick braced against the saddle-post from behind, help the fair riders over the sharper grades.

While pedaling along the almost deserted Tokaido, robbed of its former traffic by the glistening line of rails that skirt the base of yonder hills, one's thoughts irresistibly gravitate to the halcyon days before the Restoration, and dwell upon the scenes of life and color this now neglected highway must then have presented. Legitimate relics of the now historical Shogunate arrest the attention on every hand. In days gone by this splendid avenue of *cryptomerias*, casting their grateful shadows upon the solitary cyclist, harbored many a merry cavalcade on its northward march. Neglected Shinto shrines before which many a feudal lord has bent a reverential knee; Buddhistic inscriptions carved on wayside stones; time-stained *toriis*, deserted temples, barbacaned fortresses, and castellated walls, still attest the now forgotten grandeur of those pre-empiric days.

When, in the seventeenth century, the Japanese capital, to better assure the peace of Northern Japan, was shifted from the ancient city of Kyoto to Yeddo, at the head of Tokyo Bay, gorgeous Daimyo trains with a clattering retinue of truculent henchmen repaired thither twice yearly from the southern provinces to pay tribute of respect to the Shogun conqueror. Then the little wayside *honjin*, which now provides the dusty cyclist a meagre repast of rice and tea, was a lordly shelter, filled with warrior princes and their glittering trains. Satsuma noblemen in all the bravery of feudal attire;

swashbuckler attendants with pennanted lances and two double-edged swords; star-eyed *musmees*, palanquin-bearers, and the rag-tag and bobtailed ever clinging for safety to the skirts of their formidable lords, drank and caroused at these wayside inns.

Then all was excitement and color. The tea-houses rang with boisterous merriment. The smiling *geisha* danced to the tinkling notes of the omnipresent *samisen*; the children leaped, shouted, danced with glee; and dainty, winsome Omiya San—she of the wonderful hair and many wimpling pins—a dash of crimson flame on her kissable lips and the love-light shining from her sloe-black eyes, gazed longingly after the shimmering cavalcade as it wound slowly northward on its princely way.

Many a living *samurai* still remembers the mellow sunset flamings of those golden Shogun days.

To any brother cyclist who may chance this way, I can recommend no more fitting finale to a summer-day spin along this Arcadian causeway than to sit, sartorially, upon a cool, straw mat beneath the friendly shelter of a wayside inn, and, across a steaming pot of aromatic tea, surrounded by a wondering circle of silent forms, list to the tales which these old *samurai* will tell. Stories through which pulse the heart and life of the real Japan, peopled by figures in coats of mail, and vibrating with the rhetoric and pathos of the Eastern world.

These old *samurai* will also tell you how, when Commodore Perry sailed up the bay and imperiously knocked at the fluttering heart of old Japan, the people, dazed from excitement and awe, ran for miles to climb the ramparts of the hills, the trees, and even the temple-tops, to gaze in wonderment at the flagship swinging lazily at anchor in the azure bay. Signal fires flashed from hill to hill; the news fled with mercurial swiftness along the coastal towns, through the distant vales, and even to the sandy shores of the Japan Sea, until all Nippon stood, like the last of the Aztecs on their teocallitops, gazing at the Western key that was to unlock the treasure casket of the Eastern world, and rescue Japan from feudalism, internecine war, imperial rebellion, and social and commercial oblivion.

RUSSIAN HUNTING METHODS.

By Wirt Gerrare.

OF all Russian sports, to my mind the prettiest, the most enjoyable, and the most characteristic of the people is bear-hunting in the true Muscovite manner. I am aware that some sportsmen think little of it, and that the accomplished big-game hunter despises the "surround," preferring by himself to find, stalk, shoot, and, if necessary, follow up his quarry.

The "surround" is a survival of primeval customs; its object is to do the bear to death, just as the prehistoric Slavs, in Semiradski's famous fresco, are slaying the mammoth taken in a pitfall. To those who object that it is not sport, the answer is that sport is not wholly in killing, be it ever so legitimately done; it lies also in the chances and the change of scene and company that follow an outing into the snow-laden forest.

When there is a bear in Russia near cultivated land, the villagers soon know of it to their cost. Then they wait until the first fall of snow, follow its tracks, and, sooner or later, discover the spot the bear has chosen for its winter's sleep. This ascertained, they offer the killing of the bear and its carcass for sale. The price asked will depend upon the locality; if within easy reach of a large town, or near a station readily accessible from Moscow or St. Petersburg, the maximum market price will be obtained. The bear is sold by weight; ten cents a pound for bears up to two hundred pounds is a fair price; twice as much may be required for a large bear, one over three hundred and fifty pounds.

When a purchaser for the sport and the bear has been found, an agreement is drawn up, the "old man" of the village stipulating to conduct the sportsmen to the lair, or to drive the bear before a line of guns; he may also contract to convey the shooters from the nearest station to the village and back again. A wise buyer will require the bear to be actually shown or driven up to the guns—for villagers are not above receiving money in payment of their services as beaters, and saving the bear to sell again. When the agreement has been ratified, the buyer

pays ten per cent. of the purchase money on the estimated size of the bear, and undertakes to carry out his part of the contract by a stated date. From the signing of the contract until the day of the hunt, the seller, personally or by deputy, watches the lair, and if the bear should change its quarters, as it may do, it is tracked to its new abode.

The day of the bear-hunt is a grand fête day in the Russian village; the boys run out to meet the long string of sledges, and gaze in wonderment at the strangers, who, in garments of ultra-sporting fashion, seem to the simple onlookers to belong to a quite different world. Then the "old man," the seller of the bear—which is by this time dozing unconsciously in the forest near by—has to bargain with his fellows for beaters. All are anxious to participate, and crowd around him vociferating excitedly; even the old toil-worn peasants with wrinkled faces turn out into the cold, clear, sparkling air, and the steaming ponies munch at the hay in the frozen water-troughs.

The sportsmen, impatient at the delay, walk sharply to and fro, or stamp their feet on the little patch of trodden snow, and the young girls, with roguish faces and bright, smiling eyes under their colored kerchiefs, gossip amusedly anent the strangers. At last the beaters are chosen and instructed; all is ready, and the party move off in silence to the forest.

The shooters draw lots for the positions in the line; the center is the most favorable; number one is stationed to the extreme left, number two next to him, the highest number on the extreme right. By the side of each is a peasant with a second gun. All are hidden from each other; all are silent. The beaters are quickly and noiselessly extending in horseshoe fashion from the extremities of the line of shooters, and when the two wings meet the bear is surrounded.

When the ring is completed the "old man" advances into the enclosure, as near to the lair as he dares, then shouts loudly. He is answered by all the beaters; the forest rings with their yells and the thuds of their sticks on the trunks of

the trees. Hares break covert, and dodge past the shooters; a few birds silently follow; then there is the crackling of brush-wood and the bear advances to the line. He scents danger and turns before he is seen. His appearance at the boundary causes consternation among the beaters, some of whom make a hasty retreat; but the uproar is so great that he turns again reluctantly toward the silent line where the guns are. Two barrels fired in quick succession have apprised the shooters that the bear has been seen within range. They are soon followed by another loud report, and after a brief interval by another.

"*Gotov!*" is passed along the line; the shoot is over; the bear has been killed.

The turn of the peasants is yet to come. They crowd round at once eagerly, call the dead brute opprobrious names, kick and beat him; accuse him of all manner of crimes, from witchcraft to the destruction of ripening crops, until, their excitement over, they fasten the legs together, sling the carcass across a stout sapling, and carry it to the nearest riding, where a sledge is waiting to convey it in triumph to the village.

That night there is a general merry-making, at the "old man's" expense, in the great *izba* of the village; old ballads are sung of mighty hunters, and tales

Elk-shooting is much the same as bear-shooting, but not so exciting.

Winter shooting is almost entirely confined to driving out the game to the line of shooters. On lands leased to clubs these drives are often on a grand scale, and a very mixed bag is obtained. Hares, gray and white, are most plentiful; foxes are not scarce, and in cold weather a wolf will occasionally be included in the "surround."

Another way is to combine tracking with driving. A party start off on horse-back and proceed until they find the spoor of elk or wolf. If the tracks look fresh, the trackers at once dismount, throw off their heavy clothing, and run round the part of the wood in which they think the game still remains. If there are no tracks out, they call up the beaters, post the shooters, and drive out the covert. Often the animal gets scent of the sportsmen before the wood is surrounded, and makes good its escape. Then the tracks are followed, and the next hiding-place surrounded. I have known a wolf followed in this way all day and escape after all; only once was he seen, and then in the far distance.

The best-known way of ensuring the presence of a wolf is less seldom practiced by the Russians; but occasionally,



From a Painting by a Russian Artist.

On the Way to the Forest.

told of were-wolves and the witch-ridden beasts of the forest, which have from time immemorial brought ruin to the industrious husbandmen.

in the depth of winter, when wolves are voracious, a party will drive out into the forest, taking with them a small pig. When near the thickets in which the

wolves are known to hide, a gentle pinch of piggy's tail produces a squeal which no hungry wolf can resist. They will follow the sledge, heedless of danger, and are generally easily shot. Sometimes,



From a Painting by a Russian Artist.

Run to Earth by Barzois.

when the wolves are numerous, the danger is on the other side. A country sledge is soon overturned; the horses get restive and unmanageable when wolves are near, and, with a large howling pack close on one's tracks, the excitement is altogether not sufficiently pleasurable to be considered sport.

The worst feature about the shooting in Russia is the rough traveling to be endured before one can reach any ground far enough away from an urban district to be preserved with success. Some hours of jolting in a country cart, or a perilous ride on a springless vehicle, does not tend to steady the nerves or improve the eyesight.

The general shooting season commences in August; hares and birds are fairly plentiful; though in the forests and great unfenced fields it is at times difficult to find them without a well-trained dog. Rough pointers and setters of a hunting strain are preferred, and some of them are wondrous workers. To talk of men going into the forest, sitting down, and having a smoke and chat, whilst their dogs range far and near in search of game for them, seems like a sea-serpent story. People who know nothing of what a well-trained sporting dog can be taught

to do will not believe that these dogs, having found the game, return to their masters, lead them to the game, and then set it correctly.

If you are content to follow partridges only, or the willow-grouse, you may get twenty brace or more to a gun; and in September, when woodcock are excellent and plentiful, even larger bags may be made by good shots.

In spring one is sometimes called upon to use the gun in thinning out the males of the polygamous *tetraonidæ*—its only legitimate use at that season. There is good shooting, but it is not always a comfortable thing to accomplish. On one occasion, after an unusually rough drive, I got to the lodge of the preserve of one of my sporting friends early in the evening, and started out with the forester about eight o'clock; we walked for an hour and a

half, up to the knees in water and slush, and all we got was a brace of blackcock for our pains. Then we had to go two miles farther before finding a possible camping-ground. We made a fire of birch-bark, and, in about three minutes, the forester cut down a fir-tree, some thirty feet in height, to provide bedding and fuel.

At 1:30 we again got on the move, and, from a screen, bagged seven blackcock. You have only to keep quiet; the woodcock is a rare fighter, and will approach quite near, regardless of powder-smoke and the death of his antagonists.

The cock capercaillie is a shy bird in comparison; he sits on the topmost branch of the tallest tree, with his hens below, and for five or six seconds he calls or sings. Then he will remain some minutes in silence, and then sing again. If his hens answer, he will stay on, and is easily approached, but the advance must be made whilst his song is heard. If he is not answered, he flies away to the tree where some fellow-cock is singing, and a fight soon ensues, so fiercely prosecuted that the fighting birds may be approached unnoticed. The cock willow-grouse, in the spring, are called quite up to the gun by whistling or by using a quill as a call.

There is no real sport in spring shoot-

ing, but a great deal of discomfort. If one must thin out the males in a preserve, the best way is to confine oneself to the trees about a pool or river, and shoot from a shallow punt as many as one cares to wait for, or call. The boat is also used for getting silently and comfortably within range of blackcock and capercailzie whenever water is sufficiently plentiful to allow any sort of craft being used. The boat enables one to pick up the birds, and in Russia that is an important point, for gathering feathered game is more difficult than shooting it—the dogs, chiefly pointers, being indifferent retrievers, practically useless if there is much water, and in spring there always is more than one wishes for.

Dogs are of little use, if any, in ptarmigan shooting. The birds are quite common near St. Petersburg in midwinter, they lie very close on open ground, but I have never known a dog able to scent them with certainty. Success depends upon the eyesight. After a little time the dazzling white snow, and the glistening frost with which every bit of vegetation is covered, so blind the sight to anything white that the ptarmigan is found only with the greatest difficulty, and usually

only after beating a bit of covert which one expects to hold birds. It is a slow, owl-like flyer, which ought to be dropped by the poorest shot; but even when on the wing it is not easily seen, and often coveys rising within easy range get away unobserved. Walking is not easy in the great felt overshoes, which all must wear to keep out the cold, and the ground is treacherous. The birds lie out where tufts of dead grass stick up through the snow; probably near by the frozen crust is rotten, and just as the covey rises the shooter slips through the crust, and falls forward, or even drops into a hollow up to his armpits.

Though the days are very short, they are long enough to tire the most enthusiastic sportsman who goes after ptarmigan. Small bags are the rule; a brace and a half to each gun a day would be considered good sport. There are days when one cannot even see a bird. At times, without ostensible reason, ptarmigan seem to forsake all their favorite haunts and try other ground. Ptarmigan shooting is excellent exercise for the Russian chinovniks—though they prefer sport which, with less work, produces a larger and more certain bag.



From a Painting by a Russian Artist.

After Blackcock.

POULTRY BREEDING IN THE UNITED STATES.

By H. S. Babcock.



Light Brahma Pullet,
Six Months Old.

dollars a year; and this is a very conservative estimate, for some have figured it as high as six hundred millions of dollars. It certainly exceeds in value many of what are reckoned as great industries; for instance, wheat, hay, orchard products, and the output of our silver and gold mines all fall below it. The failure to appreciate its extent and value is due to the general distribution of the producers. In no other single agricultural industry are there so many persons inter-

To one unfamiliar with the statistics of poultry breeding in the United States, the statement of the value of the annual products sounds like a fairy tale. It has been estimated that this value is not less than two hundred and ninety millions of

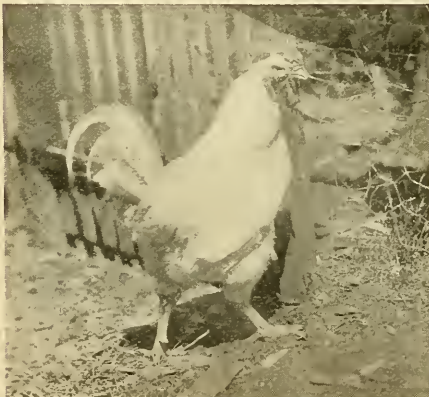
ested as in poultry breeding, and, while the output of any single producer may seem comparatively insignificant, when the total amount is reckoned the sum is almost bewilderingly great.

Poultry breeders are divided into two great classes—those who keep fowls for profit and those who keep them for fancy. The first class is debtor to the second for improved breeds and varieties with specialized functions, whereby the profits of poultry keeping are materially increased. And the second class is indebted to the first to the extent that the latter furnishes a market for the products of the former.

The public interest in poultry breeding chiefly centers in the breeders of fine poultry, who are technically known as fanciers, and this is due to the facts that they make poultry exhibitions possible, support specialty publications, create new and modify old forms in fowls, and enhance and sometimes even detract from the useful qualities of the stock which they breed. While the first class exhibits an interest in only the commercial aspects of poultry breeding, the second approaches the subject from the intellectual side. Among poultry breeders the fanciers are the brains of the industry.

Why they should be so reckoned appears when the work which they have performed is contemplated. Starting perhaps thirty centuries ago with the domestication of the wild fowl of the jungle—a fowl which still survives in its wild state in far Eastern countries—the fancier, making use of natural variations and producing, through intelligent matings, artificial variations, has so modified its descendants that there are at the present time about one hundred distinct breeds and varieties.

The changes wrought have been in size, conformation, color, markings, comb, and also in internal characteristics. The jungle fowl is of about two or two and one-half pounds weight, colored something like a Black-breasted Red Game, has a single comb, and clean shanks and toes. From this original have been produced Brahmas, which weigh from twelve to fifteen or more pounds, and Bantams, whose



White Plymouth Rock Cock, "Dignity."

weight in some cases does not exceed fifteen ounces; the clean shanks have been covered with a heavy coat of feathers in the Cochin and other allied breeds. The shape has been made both more compact and less compact; and the colors now include not only the black-red type, but white, buff, black, blue, red, solidly arranged or in various combinations. The markings have been multiplied into stripes, bars, pencilings, spangles, mottles, and splashes with almost absolute mathematical accuracy and artistic skill; the comb has become single, rose, pea, or leaf, with various sub-forms belonging to these general classes. The constitutional instincts have been modified so that increased pugnacity or almost "ethereal mildness" characterizes the disposition. Prolificacy has been increased, so that in lieu of six or eight eggs laid in a state of nature, two hundred, or even, in rare cases, nearly three hundred eggs are now produced in a year; the tendency to broodiness has in some breeds been almost totally eradicated and in others greatly increased, while the ability to fatten easily and quickly, and to lay on flesh upon the most desirable parts of the frame, has been in-

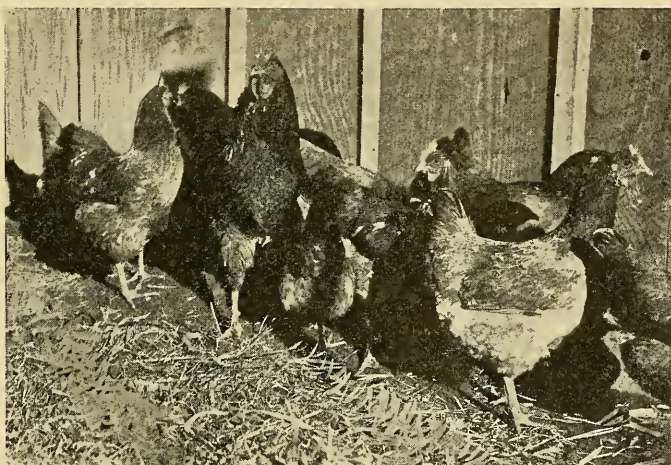
wrought into the constitution of some breeds. So great, indeed, are the changes which have been effected that some scientific men have vainly sought to prove that the domestic fowl has had a multiple origin.

In this country poultry breeding has, in addition to its natural attractiveness, been specially encouraged and fostered by three forces—the American Poultry Association, the poultry exhibitions, and the poultry press.

The American Poultry Association was organized in the early part of December, 1873, or in February, 1874, at Buffalo, N. Y., with William H. Churchman as its first President. It had then but a small membership, but has continued to grow, until its membership is now four

hundred and thirty-five, distributed among thirty-seven States and Territories, including Canada and England. The work of the Association has been felt through its annual meetings, held in various parts of the country, but especially in the publication of a standard of the different breeds and varieties of fowls. This work has gained an authoritative position in the poultry exhibitions of the country and is the accepted guide of the fancier in his breeding operations.

The poultry exhibitions, by affording fanciers an opportunity of exhibiting their finest specimens, have stimulated the breeding of choice fowls. They have also taught the public the difference between



Single-Comb Rhode Island Reds.

well-bred and ill-bred poultry, and have largely increased the ranks of the fancier, widened his market, and made his sales of surplus stock remunerative.

The poultry press, through the literature it diffuses and the illustrations of fine specimens which it publishes, has been a powerful educational force, and has greatly stimulated poultry breeding.

In the American standard of perfection there are, among ordinary domestic fowls, eleven classes—the American, Asiatic, Mediterranean, Polish, Hamburg, French, Dorking, Game and Game Bantams, Oriental Games and Bantams, Bantams other than Game, and miscellaneous. These classes are subdivided into breeds, and the breeds subdivided into varieties.

Outside of the standard, waiting for



Red Game Cock, Winner of Thirteen First Prizes,
"Adirondack Chief."



Unbeaten Silver-Gray Dorking Cock, "Johnstown."

the time when they shall be admitted to its pages, are quite a number of well-defined breeds and varieties of special interest, because, for the most part, they are the latest work of the fancier and show most clearly the tendency of modern breeding. They are the last thoughts in the world of poultry, and, as such, deserve priority of consideration.

Prominent among the unrecognized breeds, and at this time the most popular of them, stands the Rhode Island Red. This is a fowl of medium size, the cocks weighing about eight pounds, clothed in

a plumage of cherry red in the males and a reddish buff in the females. At present they are bred with three styles of comb—pea, rose, and single. Not only does this fowl possess great economic merit and real beauty, but it has a peculiar interest in that it is the progenitor of two standard varieties, the Buff Plymouth Rock and the Buff Wyandotte. Its own children have distanced it in the race for standard recognition.

The Argonaut, a fowl of similar economic merits, but trimmer in build and more like the Game in appearance, is clad



Barred Plymouth Rock First-Prize-Winning Hen,
"Lady Mary."



Barred Plymouth Rock Prize-Winning Cock.



First-Prize Houdan Pullet, "Bonnie Lass."



Prize Houdan Cock.

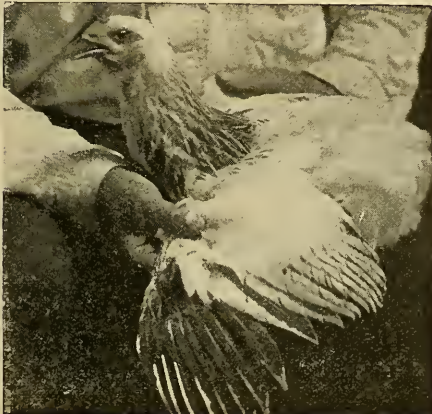
in a rich buff plumage, has a pea comb, and has proved to be an admirable general-purpose fowl. It has been bred but in limited numbers, and is therefore much less widely known than the Rhode Island Red. It is, however, not at all inferior to that excellent breed.

The Penciled Wyandottes, golden and silver, are among the latest comers. These fowls, with the blocky build of the Wyandottes are clad in very handsome plumage. They differ from each other only in their ground color, one being a mahogany or golden bay, the other a silvery gray. The feathers of the females have three pencilings upon each feather,

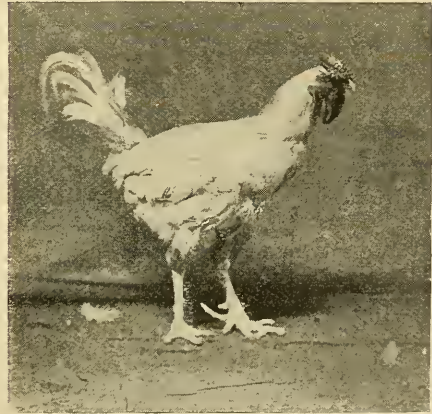
these black markings following the contour of the web of the feather, one within the other. The males have black breasts, striped huckles, black tails, and a red or silvery-white upper color, according to the variety.

The newest Bantam is the Brahman. In color it resembles quite closely the Silver Penciled Wyandotte, but it has the Hamburg shape. These dainty little beauties are still in the possession of the originator, he having refused to part with any of them.

Among other unrecognized breeds are some which have been recognized by the American Poultry Association, and after-



Light Brahma Cockerel, Eleven Weeks Old, Showing Wing.



Unbeaten White Dorking Cockerel, "Boston."

wards excluded from the pages of the standard, like the Jersey Blue and the Pea-combed Plymouth Rocks, and others which have never been so recognized. To this latter class belong the White Wonders, a large fowl somewhat resembling the White Wyandotte, but with feathered shanks; the Sherwoods, which have quite a close resemblance to the White Plymouth Rock, but have feathered shanks; and the Erminette, a fowl with a white body plumage covered with small black spots or ticks. This latter fowl would have been a standard breed, in all probability, but for the fact that its breeders were unable to agree upon a standard, and bred it, according to individual predilection, with smooth and with clean shanks, and with three types of comb—



White Wyandotte Chickens, Twelve Weeks Old.

pea, rose, and single. Even upon shape there was an unhappy divergence of opinion. But it was and is an excellent and attractive fowl.

Among the recognized breeds in the American class the two most popular and typical are the Plymouth Rock and the Wyandotte, and of the several varieties of these, the Barred Plymouth Rock and the White Wyandotte are bred in the greatest numbers.

The Barred Plymouth Rock for a long time was the American standard for excellence. Upon it more care and thought in breeding have been bestowed than upon any other American variety. Greeted at its origin as "the great American mongrel," by its merits it transformed its detractors into ardent advocates, and, with-

out knowing what a boom was, it steadily grew into favor, until it was easily the first fowl in its class. Its plumage of grayish white, transversely barred with clean black, grew by degrees from a dull, unattractive appearance into a real beauty, until to-day it is regarded as one of the most finished products of the breeder's art.

But the supremacy of the Barred Plymouth Rock in popularity has been vigorously challenged by the White Wyandotte. This fowl, a descendant of the Silver Wyandotte, the original variety of the breed, leaped into a sudden popularity. But the boom died out, and a period of comparative obscurity followed. Out of this obscurity it has gradually emerged, and at the last winter shows more White

Wyandottes were on exhibition than there were specimens of any other variety.

The Asiatic class is composed of the Brahmans, the Cochins, and the Langshans. The leading variety in the class is the Light Brahma, the largest variety of domestic fowl. Its plumage is milky-white, with the neck feathers agreeably striped with black, the tail black, and the primaries and secondaries of the wings partially

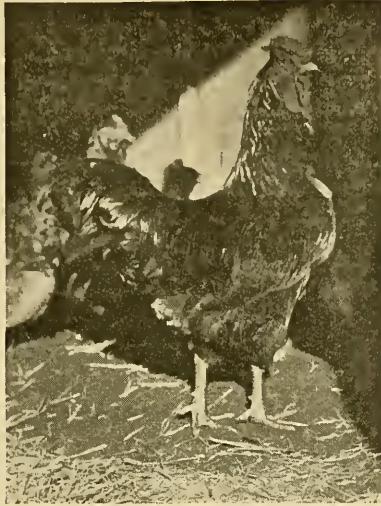
black. The Cochins are the most heavily feathered of our fowls, their legs and feet being heavily clothed, and their bodies an immense mass of soft plumage. The Buff is the most popular variety, though to many the Partridge is the handsomest. The Black Langshan is one of the most popular varieties, if not the most popular variety, in this class. It had a hard fight for a position as a distinct breed at first, being regarded by many as a poorly bred Cochin; but it has lived to triumph over the Cochin in popularity. This position it has won upon economic grounds, by proving to be a much superior layer to its nearest relative.

The breeds in the Mediterranean class are distinguished by lightness of build, airiness of carriage, activity of disposi-

tion and greater prolificacy. With the exception of the rose-combed varieties of the Leghorns, they all have large single combs. They are among the best, if not absolutely the best, layers. Their eggs are white in color and large in size. In this class we find the several varieties of the Leghorn, the Minorcas, the Black Spanish, with its striking white face, the Blue Andalusian, and the Mottled Ancona.

The Polish class contains some of the most ornamental of domestic fowls, the specimens being distinguished by their large, rose-like crests. They were originally reckoned among the best layers, but their ornamental characteristics have been developed in disregard of their practical qualities, so that the Polish fowl is now regarded as a purely ornamental fowl. Yet no breed is wholly lacking in useful qualities, and, therefore, cannot be purely ornamental.

Among the Hamburgs we find, not only some of the best layers, but fowls with elegant figures, rich colors, and beautiful and accurate markings. The spangled varieties have, upon a golden-bay or silvery-white ground color, great round moon-shaped black spots, and the penciled varieties have the feathers transversely and heavily marked with lines of black. Few



Rhode Island Red Cock, Rose-Comb.

fowls are more beautiful or more profitable as egg-producers than the Hamburgs, and yet they have, strange to say, comparatively little popularity. This is probably due to their being small and of little value for the table, as well as to the difficulty in yarding them. Besides, they are somewhat delicate and difficult to rear.

The French breeds have never been very popular in this country: the Crève-cœur, a big,

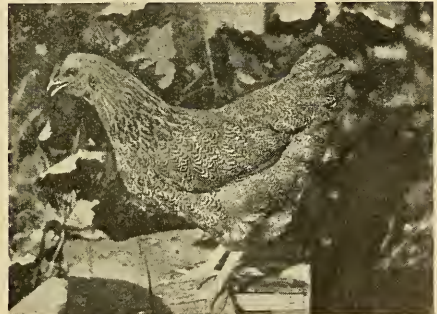
black, crested fowl; the La Flèche, a black nightmare in feathers, with antlered comb, and the Houdan, with large crest, and plumage of mottled white and black, comprise this class. All of the breeds are excellent table fowls. The Houdan is much the most popular and seems at present to be gaining in public favor.

The Dorking—the Englishman's ideal table fowl—has never made much progress in this country. It is a rather inferior layer, and has white legs and a white skin, which do not accord with American taste. Some good specimens, however, are bred here, especially in New Jersey and Pennsylvania.

The game, whether large or Bantam, is the ultra-fancier's fowl. Upon it more time, thought, and money have been ex-



Prize Golden Penciled Wyandotte Cock.



Prize Silver Penciled Wyandotte Pullet.

pended than upon any other breed. Originally bred for the pit, with short legs and full plumage, it has been modified and developed, until it now stands upon the longest of legs, with an upright, martial bearing, and has a plumage which fits the body like a glove upon a lady's hand. In brilliancy of color it is surpassed by no breed. It has the keen, sharp look of a thoroughbred racer, and is reckoned the *crème de la crème* of fancier's fowls.

The Oriental Games consist of the Malay, an immensely tall fowl, with overhanging eyebrows, which give it a fierce and cruel expression; the Black Sumatra, with iridescent plumage and a long, pheasant-like tail; and the Indian, which has been denominated "the prince of table fowls," and is, withal, one of the hand-

curved toward their heads; and the Rumpless, which are innocent of a tail, and are even lacking in the projection out of which, in other fowls, the tail grows.

Among the Bantams we find diamond editions of the Game fowls; miniature Brahmas and Cochins; diminutive Polish fowls: little Japanese, with legs so short that the body seems to rest upon the ground, and tails so high that the sickles reach above the tops of the combs; and the rose-combed varieties, Hamburgs in shape, in color black and white, with the golden and silver bodies of the Seabrights, most exquisitely laced with black. These little fowls are extremely popular, and their popularity is increasing by leaps and bounds. People are beginning to learn that they are really profitable fowls to

keep, and, as they can be kept anywhere, many who could not keep large fowls are undertaking the care of Bantams.

In a general survey, like this, of the status of poultry breeding in this country, it is impossible to discuss many of the topics connected with the subject, but the reasons for the great developing interest in poultry breeding may be summarily given in the following propositions:

1. Poultry breeding

takes one into the open air.

2. It is a self-supporting hobby.

3. It opens, in a practical way, a new field of intellectual activity.

4. It gratifies the normal human desire to be surrounded with living creatures.

5. It enables one to employ talents akin to creative power.

6. It leads to many agreeable contests.

7. It gives all the members of the family a common object of interest.

8. In a word, to sum up the seven foregoing reasons, it is, when undertaken as a hobby, a source of much pleasure, sufficiently manual to divert the overtaxed brain of a business or professional man, and sufficiently intellectual to stimulate and refresh the mind.



Barred Plymouth Rock Chickens, Twelve Weeks Old.

somest of breeds. The colors of the cock are extremely rich and lustrous, and the hen has a bay plumage, each feather of which is penciled with two black narrow markings, one within the other. These markings, in the best specimens, look as if they were embossed, and the effect is very beautiful.

In the miscellaneous class, as its name indicates, are collected the breeds which have few points in common and are not readily classifiable under any other term. Here we find the Silky, with its webless plumage, which looks more like fur than feathers; the Sultan, possessing a combination of characteristics belonging to the Polish, the French, and the Asiatic classes; the Frizzles, whose feathers are

COURSING ON WESTERN PRAIRIES.

By W. S. Harwood.



The
Slips.

YOU cannot easily forget your first coursing meet in America. The brown autumn grasses, here and there relieved by tufted mounds of green, stretch away and away to the far purplish line where the sky comes down to earth through the haze of Indian summer, a mighty dome of blue above, not a mountain, or a hill, or a tree, or a river to the uttermost bounds of the land—one vast, unbroken plain. The crisp air of mid-October tempers the rays of the sun; a soft breeze sends a fine and delicate tremor through the long grasses in every gentle swale; there is no cloud in the brilliant sky. If on some midsummer day you have looked up to the sky of Lapland, far inside the circle, you have seen such blue.

Everybody from the little town, ten miles away, who could rent or borrow a conveyance of any shape, style, or age, is here; even the bicycle rider has come, and, so level is the floor of the plain, he may follow the hunt with comparative ease. Men of city ways and garb are here also, who have come perhaps fifteen hundred miles from Atlantic or Pacific coasts. Not a few of them are English born and bred, with keen remembrances of coursing in their native land, finding in this newer type a different, but not less fascinating, interest. There are parties in carriages, in lumbering country-place hacks, in light vehicles, in ramshackle livery rigs, and there are country wains drawn by big horses bespeaking their French or English origin—it is a motley throng.

The drawings for the events have been made, the hounds are paired for the initial slip, the vehicles stand side by side in an unbroken, quite even

line stretching out a thousand feet or more across the prairie. It is understood that no one may advance at a swifter pace than his neighbor, no matter how insistent the temptation to be nearest the hounds when they are slipped. All must remain within a set distance from the slipper with his slender, beautiful dogs in leash.

At a signal the cavalcade begins the advance. The ground beneath the wheels of the rumbling wagons has never been disturbed by the plowshare. It is virgin soil. Now and then you may feel the jolt of your wheels as they strike the ridge of a buffalo "wallow"—remembrance of the days when the bison gathered in noble herds upon these plains—but, for the most part, it is easy riding.

Midway in advance of either half of the line, horsemen ride back and forth to keep the alignment. At the extreme ends of the line other horsemen scurry hither and thither across the plain to beat up the long grasses for hares.

A clear cry comes from a horseman in the distance, and the cavalcade pulls up. A rabbit has been raised, and the slipper in the center, a young man in jacket of brilliant scarlet—about the only note of color save the blue above—is holding back one of the lithe hounds with a firm grip until his companion may catch a glimpse



Between Courses—California Coursing Club.



READY!

of the quarry. You sweep the vast field before you, and your eye, now grown somewhat accustomed to the strain of immense distances, notes the stirring in the grasses where the hare is gently ambling. In another instant the second hound has caught sight of it; with a deft pull of the thongs the brace is slipped, and the contest is on.

There is absolutely nothing to impede the course as the hounds spring splendidly away. No fence, no copse, no ditch, no hills, naught but the level prairie whose only bound for hound, or hare, or horse is the faint line where sky melts into plain. So quickly one can scarcely realize it all, the hounds are well-nigh out of sight—you will need strong field glasses. They are running in magnificent style, for the conditions are perfect, and the blood of a royal ancestry is in their veins.

Suddenly there is a quick turn, and then another, and the three are coming back straightaway for the line of carriages, at a pace like that of the mad storms that sometimes sweep these plains.

The hare has laid her course and she scarcely wavers a wrench. Excitement is at fever heat. The hounds are close behind her, not ten lengths away, and the gap is closing. They had run three miles at the turn, and the mettle of hare and hounds is being put to the severest test. Seconds pass like minutes to the breathless crowd. There is no sound but the restless stamping of a horse at your right and the delicate notes of a late autumn bird atilt on a swaying golden-rod stem. Another second and you are joining in the resounding cheers that break the stillness, as, not five yards from the line, the fleeter hound has flung the powerful hare in air and the course is won. It was a royal race, fit to be run anywhere on the globe.

All the long, cloudless, beautiful day the sport keeps up. You may in that time travel ten or even twenty miles straightaway and return; you may wheel in a giant's circle; or you may hunt forth and back over practically the same territory—the field is limitless, and there is neither landlord nor tenant to say you nay. There are no regulations as to where the spectators shall remain—they move with the hunt. Once in a while some slightly rising piece of ground will serve as a point from which to watch the coursing upon various sides, and when the hounds are

circling through the vast open this affords a capital observatory. Quite likely some such place will be selected as high noon comes for the midday lunch.

It would seem as though coursing with such magnificent native surroundings should long ago have become popular in America; and, even though the interest is steadily, if slowly, gaining, that it should have been more pronounced in its progress. No doubt various obstacles intervene; among them the newness of the country where the prairie coursing is most followed, a vast agricultural region whose inhabitants are more interested in wheat than in hares; while the fact that the region is well on to two thousand miles from either the East or the distant West, rendering access not altogether agreeable, has doubtless been a deterrent.

Perhaps for a half-century there has been private coursing in the United States, but the congregating of coursers from regular organizations is of comparatively recent date. In California close coursing has long been popular, and some of the clubs have splendidly equipped grounds. Large sums of money are given in prizes. The climate there is such that the sport may be engaged in throughout the year, and the interest in it, both in the actual events of the course and in the maintenance of the highest possible standard of excellence in blood of hounds, is constantly increasing.

In the large region which includes much of the two Dakotas, Kansas, and Nebraska, with portions of Iowa and Minnesota, open, or prairie coursing is most in favor. It would seem that this kind of coursing is the ideal type, however many the advantages of close coursing when carried on in a fair and sportsmanlike manner. In the early spring some very interesting meets are held, though the season from the first of September to the latter part of October is perhaps the most delightful.

There is now a main supervising, and, in a sense, controlling body, known as the American Coursing Board, of which Mr. J. Herbert Watson, of Brooklyn, N. Y., for some time was president, succeeded last fall by Mr. L. F. Bartels, of Denver, Colo., and of which Mr. John Charlton, of Minneapolis, has for some years been the secretary. This Board is the court of last appeal in American

coursing. It is composed of members of accredited coursing clubs from any portion of the country, two from each club. The Code of Rules of the Board provides for the conduct of all meets. Prominent among the rules insisted upon is the one which provides that the judge shall decide

all courses upon the principle that the greyhound which does the most toward killing the hare during the continuance of the course shall be declared the winner. Severe penalty is provided for any fraudulent or dishonest conduct in connection with any coursing meet.

In a general way, the entire sport, save as it may be modified to meet local conditions, follows coursing in England. Indeed, so far as practicable, coursing in America



After the Morning's Exercise.

is a copy of coursing in Great Britain.

The points are the same as those under which English coursing is conducted:

1. Speed — which shall be estimated as one, two, or three points, according to the degree of superiority shown.
2. The Goby — two points; or, if gained on the outer circle, three points.
3. The Turn—one point.
4. The Wrench—half a point.
5. The Kill—two points; or, in a descending scale, in proportion to the merit displayed, which may be of no value.
6. The Trip—one point.

Still more closely to articulate with coursing England, a Waterloo has been established. It has not, to be sure, ar-



Slipper, Flag Standard, and Judge.

rived at the dignity of the Waterloo of Altcar, long the focal point of the world's coursing; yet the American Waterloo bids fair to become, to coursers on the western shore of the Atlantic, as famous as that of the blue ribbon of the leash to those who dwell on the east.

The American Waterloo was established in October, 1895, at a ten days' meet on the great prairie in the vicinity of Huron, S. Dakota. The nominations were just half those of the English Waterloo, thirty-two, which has since been

1898—E. C. Kellogg's Iowa Girl and Lady Gilmore; divided.

1899—J. H. Rosseter's Emin Pasha and Allan & Lyon's May Queen; divided.

The Waterloo is run under the supervision of the American Coursing Club.

In the year 1894 the American Coursing Board instituted the Greyhound Stud Book, which has become the accredited official record of the dogs of this class in the United States. It is patterned on the English Stud Book, and is proving an important feature of the sport. It not only



Union Coursing Park, San Francisco.

maintained. It was one of the most interesting and successful meets ever held in America, and fitly inaugurated this important feature. The winners of the American Waterloo have been as follows:

1895—Melrose & Durbin's Gilkirk; C. A. Robinson's Diana, second.

1896—J. H. Rew's Frank Green; S. J. Coyne's Mona, second.

1897—N. P. Whiting's Rochester and Minneapolis; divided.

aids to keep the standard high, but it is a stimulus to the importer and the breeder. Its pages will show the influence of English strains. American coursers have not been slow to see that that exclusive and inclusive element which, for want of a better word, we call blood will tell in hounds as well as in horses. So it has come about that there has been keen rivalry to secure from England the get of the noblest. The result is a fine and virile race of American dogs coming on.

It ought to be the earnest desire of the coursers of America to keep the sport free from the taint of the betting-ring and the



Gulkirk, Winner of First American Waterloo,
1895.

pool-room. Owners of hounds who do not have this desire are not coursers; they are gamesters, and are not entitled to consideration other than that they may be pilloried as foes of clean sport.

All this we discuss in the intervals of the day, or as we wend homeward, having finished our day's coursing on the wide Dakota prairie. The golden autumn moon is just showing at the horizon line, so huge and near and round a ball that you half expect it to come rolling out across the dusky prairie to meet you. You hear no sound as you drive on toward the little town, with its twinkling lights showing far away, save now and then a sharp, metallic, vindictive rattle in the grass by the roadside, where some disturbed rattlesnake—one of the venom-charged race now, happily, disappearing—sends out his challenge. If there is something of the sublime in the reaches of the plain by day, it is even more inspiring by night, with the stars thick in the dark sky; something the opposite of the relative and the tentative and the every-day. There is freedom in the hardy life of the mountaineer, but there is freedom plus breadth in the prairies of America; and whether you go back to your city home winner or loser, or neither, you will carry the memory of a week of magnificent sport.

BIG SHARKS AS GAME.

By Charles Frederick Holder.

THE shark is not generally considered a game fish, but rather a loutish scavenger, a bait-taker, and a general nuisance, to be hauled in, strung up, and executed with derision. Yet, despite its reputation, I am inclined to champion this maligned boneless monster; basing its claims to gameness upon many bouts I have had with it, often single-handed, in various waters from Maine to California.

If one does not undertake shark-fishing in a sportsmanlike manner, there is very little sport in it. The typical method of shark-fishing is to bait a large hook with a piece of salt pork, fasten it to a hawser, and, if it is caught out at sea, trice the shark up to the main-yard, all hands laying on to take part in humbling what they term the common enemy.

So handled, the shark has no opportunity to display its powers. If, however, it is fished for with a recognition of what constitutes fair play, it often becomes a

foeman well deserving the attention of the sportsman.

I have taken sharks ranging from sixty to one hundred pounds with a twelve-ounce rod and a twenty-one-thread line and found it excellent sport; in fact, one of the most exciting contests it was ever my good fortune to have was with an eight-foot shark, which I hooked in Florida when standing almost waist-deep in the surf fishing for hog-fish. The gamy creature towed me half a mile down the reef before it was brought to what usually would have been the gaff, but, in this instance, was release.

Ordinarily a shark twelve or fifteen feet in length is considered game for twenty men. It is hooked by two or three; the others then take the rope, and the big fighter is run up on the beach helpless; but if a man matches his skill and strength single-handed against so large a fish, a vast amount of sport may be enjoyed. True, it is sport of a gladiatorial kind, a

fight to the finish, when the superior animal is often overmatched; but the true sportsman is, I fancy, much more satisfied to be defeated single-handed by a gamy fish than to be one of a party to take it by unfair means.

It has been my good fortune to catch sharks of all sizes in many waters, and nearly always I have been able to afford the game a fighting chance. When this is done, I can commend the shark as a gamy contestant. What I mean by fair play is to take all sharks up to one hundred and fifty, or even four hundred, pounds with a tuna rod and outfit, which may be briefly described as a sixteen- or eighteen-ounce, seven-foot rod, and one thousand feet of twenty-one-thread line.

Larger sharks, up to one thousand or more pounds and from ten to fifteen feet in length, should be taken with the hand-line from a light boat; and, assuming that the fisherman delights in lusty sport with more than a spice of danger in it, it can be commended.

Most of my shark-fishing has been done on the extreme outer Florida reef, the home of various kinds of sharks, ranging from so-called man-eaters, thirteen or fourteen feet in length, to ugly shovel-nosed sharks ten or twelve feet long; yet the legends of the reef did not record a single instance of a tragedy from these fish. I was once a witness of the sinking of a boat off a certain favorite fishing point where I had often, by pouring over beef blood and other "chum," conjured up a seething maelstrom of these hounds of the sea; yet the three men forming the crew, whom it was impossible to save, and who drowned, were not touched by the sharks which infested the place.

Of course, every sportsman who came down the reef to this jumping-off place in the direction of Yucatan was entertained with weird stories of conflicts with sharks and taken out shark-fishing. The usual outfit for the sport was a light boat,

the greener the hand the lighter the craft; and it was considered rare sport among the habitués of the key to see a novice "cross-bucked," as they called it. This consisted in being thrown out of a dinghy by a shark which jerked the line from the bow over the rail, invariably capsizing the boat and forcing the fisherman to leap into the water. As the victim had been duly impressed with the ferocity of the sharks and regaled with stories of anglers taken from boats, this was quite an ordeal.

I had a boat built and equipped for shark-fishing. She was sixteen feet long, of cedar, very light, with a small deck which covered an air tank, while a row of cans along the sides, decked over, made her so buoyant that she would, when filled with water, hold eight or ten men. The line was a small manilla rope three hundred feet long, with a four-foot chain and a hook of steel, of royal dimensions.

Thus equipped, two fishermen, eager for a trial of conclusions with the tiger of the sea, would row to a certain point of the reef which juts out into the channel, and anchor by hooking on to the coral a boat-hook which could be easily hauled in. The ancient and honorable chummers of the New England fishing guild would have looked with amazement at the methods here employed to ensnare the largest



Graining a Nurse Shark on the Florida Reefs.

game. Negroes were engaged to tow out the rejectamenta of a slaughter-house, beef blood was poured overboard, and, not long after, the waters would be swirling with sharks fighting for the food,

tearing it apart with so much action and expression that a pack of hounds was invariably recalled.

Among these monsters was one whose length was estimated at fourteen feet. I determined to try and capture this individual, but it was difficult to select one when there were so many. A large steel hook and chain with swivel was baited with a ten-pound grouper and adjusted to a float so that it hung four feet below. Hardly had this drifted clear of the bristling coral when it was the object of attention on the part of several sharks. They did not rush at it after the approved method of the shark in the popular story, but with deliberation, guided by unerring sense of smell.

Ahead of them, darting here and there, was an advance guard of several pilot-fishes; while each shark had its body-guard of remoras—black, eel-like creatures, which clung to the dusky sides of their hosts like leeches, their slender bodies writhing and twisting as they were towed along.

Several sharks of comparatively small size approached the bait, which was deftly jerked out of their way; whereupon they would turn clumsily, wheel about, and try again. Finally, up out of the deep sea came the great man-eater, looking so colossal that one felt that it would be a matter of chance whether it could be brought to terms. It swallowed the huge bait at one gulp, swinging its head to one side with an impatient movement as the serrated teeth crunched upon the chain. As my companion lifted the coral hook I paid out the line until perhaps ten feet had been taken, and then jerked the steel point into the monster's throat.

The response nearly carried me overboard. Though well prepared for it, I was thrown against the rail upon my knees, and was elbow-deep in the water before I could relinquish the line, which went over the side with an ominous hiss. The stout manilla rope, carefully coiled forward, went leaping into the air like an endless snake as my companion turned the boat in the direction of the flying fish and stood ready with the oar to steer her directly in its wake. The shark would have taken the entire line had I not seized it with a piece of canvas when about two hundred feet had gone, stopping it with a turn, first seeing that it had slipped into

the notch in the bow made for the purpose.

The first rush of the shark, indicating its alarm, was in the nature of a stampede, in which every shark in the vicinity, apparently, joined; so that for a while our boat seemed to be the center of a shark brigade. I could distinctly see their forms beneath and on each side of the boat flying along with us. The effect of checking the line was possibly to enrage the stricken shark; it crowded on more speed and pulled the light boat down almost bow under, so that the deck was nearly flush with the surface, and on each side rolled a wave of foam as though from a launch.

The shark had, either by chance or from knowledge, turned into the outer channel, which led directly out to sea, and was momentarily edging into the deeper blue channel which was one of the arteries of the atoll. It became necessary, therefore, to slack away the line. I was doing this when, without warning, the monster made a terrific lunge. Perhaps it had been attacked by some even larger shark, or had suddenly awakened to its danger; in any event, it bore away about fifty feet of the line with a rush; then, turning quickly, jerked the rope from the slot and over the gunwale amidships.

It was a trick well devised—if, indeed, it was a trick—and well carried out, and had I not been able to slack away the line at once, the boat would have filled. As it was, the water poured in as we sprang to the weather side, now in air. As I let go the line the boat righted and the rope went whirling and hissing out. It was a moment's work to slip it into the notch again, and away we went in the original direction, the boat a third full of water.

The channel ran to the north for half a mile, then turned to the westward and spread out into a wide passage of unknown depth. The shark, apparently, was making for the open sea, and once it got where the water was five or six hundred feet deep it would sound, and nothing could stop it. It was necessary, then, to turn it, if possible, before it reached deep water; so we took up the line and heaved, bracing back hard against the seat; but after working ten minutes the only perceptible effect was that we were going faster, while the line was so taut that it hummed like the string of a mu-

sical instrument. We then shipped the oars, my companion holding and backing them against the fish, and a bucket was tossed over and towed.

These expedients seemed to urge the shark to further efforts, and on we rushed, headed for the outer sea. It was manifestly impossible to stop the shark, and we had the alternative of being towed an indefinite distance or of cutting the rope. Two miles ahead was a fishing-boat, so we decided to continue the struggle until she was reached—hauling on the rope; making a foot, now and then, but more often losing two or three.

After perhaps another mile the bucket

prepared for the rush which we knew might come at any moment.

We had been towed perhaps three miles against the obstacles, and finally saw a gleam of white and felt that the finish was near. Giving the word, we both hauled with all our strength, and were repaid by the clank of the chain against the keel—the game was ours. But not yet. The monster rolled over several times; then, feeling the bow against its nose, turned and seized the cut-water in its cavernous mouth and crunched it, driving the serrated teeth into the wood. Then, hanging on like a bulldog, it made a rush ahead, lifted the bow out of wa-



Handling a Hammerhead from a Small Boat—California Coast.

and the oars had evidently made themselves felt, and there was a noticeable relaxation. The shark was rising; either it had met a shoal reef and was climbing its banks, or it was losing strength. We assumed the latter, and hauled the boat upon it, foot by foot. Before we had gone another mile I could see the dusky form, not ten feet below, swimming sturdily along with a powerful movement of its tail, the pilot-fishes and remoras still alongside, as though nothing unusual had occurred. I held the rope in the bow, with knife between my teeth, ready for an emergency, lifting when I could, and my companion, coiling the slack amidships,

ter and almost capsized the boat. My companion very nearly lost his balance, and, thinking that we were going over, hailed a fishing-boat about two hundred yards distant; but we righted, and grasping a heavy oak gaff, I thrust it into the maw of the shark and fought it off. I had the chain in a firm grasp with a turn, and the mouth of the man-eater was not more than three feet from my face, as terrible a living guillotine as could be imagined. Row after row of serrated teeth could be seen, one row erect, the others lying flat except when in use, and forming a veritable pavement.

To handle such a shark, weighing per-

haps fifteen hundred pounds, was no easy matter, as its mere weight was an obstacle to progress. The game had been brought, theoretically, to gaff, but to land it was another proposition. The size of the jaw and the complete equipment of porcelain-like teeth were the incentives, and it was decided to attempt it. The man-eater was triced up to the bow, and would have to be transferred to the stern to tow. During our attempt to accomplish this it turned the tables on us and almost swamped the boat.

All this time the line had not been lifted from the slot in the bow, and it was necessary to do this with dispatch and transfer it to the scull-hole in the stern without giving the shark any slack or opportunity to break away. The moment was selected after a paroxysm of whirling and rolling, which, thanks to the freedom given by the swivel hook, it could do. My companion placed the line in the stern, and at the word I released the chain, sprang to the stern, and hauled with him; but the shark, feeling itself apparently free, dived beneath the boat. It had perhaps eight feet of line, and jerked the stern down with so much force that the boat was again a third full before the line

to swim doggedly along, heading up the channel; and in this position we sat, holding the line while our huge steed towed us within half a mile of the point from which we had started, where, after having hauled us in all perhaps five miles, including circles and rushes, it gave signs of weakness; its struggles almost ceased except for an occasional lunge, and from here it was towed in; yet this occupied nearly two hours, owing to its repeated lapses from the quiescent state.

Reaching the beach, the line was tossed ashore, and two score men pulled the shark up on the sands, where it was found to measure between thirteen and fourteen feet in length; but it was the girth of the monster which made the greatest impression upon the average observer. It was impossible to weigh the huge creature, but few of those who saw it placed the weight at less than fifteen hundred pounds, and every ounce of it was game.

On the Californian coast the Bonita shark abounds, and in the neighborhood of Santa Catalina they afford great sport. Occasionally a white-oil shark is captured. I have taken the Bonita over six feet in length on a fourteen-ounce rod and a twenty-one thread tarpon line. The

white-oil shark is larger than the Bonita, measuring up to nine feet in length, and weighing 250 pounds or more.

Rod sea fishing for sea monsters on the Pacific coast is practiced much more than it is on the Atlantic, where except for the tarpon, one seldom hears of any big sea game angling. So much is it encouraged, indeed, in California, that the Tuna Club's regular yearly tournaments and prizes attract entries widely and create great interest among anglers

of the world. Previous to the formation of this club, the clumsy hand-line ruled for the most part in deep-sea fishing. The encouragement given by the Tuna Club has changed all this for more workmanlike and sportsmanly methods.



Shark Seizing the Cut-water and Lifting the Boat.

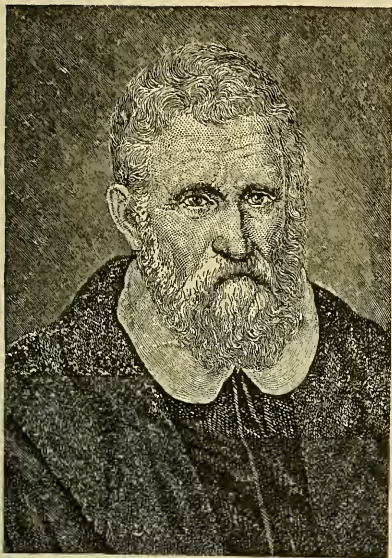
could be slacked away. We held on, and within fifty feet stopped the shark and held it until the boat was bailed out.

Then, again, began the work of hauling in, this time up to the stern. When within ten feet of the latter the shark began

MARCO POLO'S ADVENTURES.

THE GREATEST TRAVELER THE WORLD HAS SEEN.

By Edward S. Holden, LL.D.



From Winsor's "Columbus."

Marco Polo.

OF all books of travel and adventure, the book of Ser Marco Polo, the Venetian, concerning the kingdoms and the marvels of the East is the most famous and the most interesting. He left Venice in the year 1271, and returned to his old home twenty-six years later. In the meantime he had traversed the provinces of Persia and the nearer East, crossed the high steppes of the Pamir region and the whole length of China, and resided at the Court of the Grand Khan of Tartary, for many years, as one of his trusted officers. For a part of the time he was the Governor of a great Chinese city, and he was often intrusted by the Khan with important missions to distant parts of the Empire, and even to foreign countries.

By a lucky chance, as he himself styles it, he was permitted by the Khan to return to Venice, where he lived the life of a merchant prince, glad to converse about his extraordinary adventures, but with no thought of writing them out for future generations to delight in. By a chance still more fortunate for us, what-

ever he may have thought of it, he was imprisoned for about a year in Genoa, in the company of a professional man of letters. Here he dictated a long account of his travels in the kingdoms of the East and of the marvels that he had seen.

His book is of the first importance to historical geographers. It is of the highest interest, also, as a human document. It is, moreover, one of the great story-books of the world. It not only throws a flood of light upon the state of southern Europe in his time, but it opens the East, till then unknown.

The amazing conquests of the Mongols under Jenghiz Khan and his successors brought the East, from the steppes of Russia to the Pacific, under a single dynasty. Whoever had a *Tablet of Authority* from the Grand Khan could travel unmolested from the Oxus to the Hoang-Ho. Marco Polo lived at precisely the right time. Not long after his death, the Farther East became closed to all Europeans. The Moslems succeeded the Mongols as rulers in Central Asia, and they stopped the road to China like a wall. No European could pass. This road was not opened until the sixteenth century, when China was rediscovered, so to say.

Marco was a merchant—and so he tells us of trade; he was a soldier—and he tells us of the wars of the Tartars; he was a court official—and thus we have an account of the government; he was the ruler of a great city—and we have from him a picture of the Chinese people in their homes; he was the trusted ambassador of the Emperor to foreign parts—and he has described many provinces of the remote East from personal experience; others he describes from hearsay. Many names now familiar—the Pamir, Madagascar, and so forth—appear in his book for the first time.

This resolute, intelligent, and sober-minded man spent the best years of his life under absolutely unique conditions. Some parts of his story are retold here, almost in his own words.*

*Making use of Colonel Yule's scholarly text and notes.

It was in the year 1271 that Marco, then a lad seventeen years old, started with his father and his uncle on his long journey of three years to Peking. Nearly every step of the way was full of danger.

On the sea they traveled in frail sailing vessels, with no compass to guide them—for the compass was then unknown in Europe, although well known in China. By day they coasted along from headland to headland. By night they anchored near the shore when they could find a sheltered bay, or else steered timidly by the stars. Contrary winds delayed them, or drove them out of their course. Their vessels were small affairs, not able to buffet storms. The seas they traversed swarmed with pirates and enemies.

On land they made their journeys on foot, on horseback, and on camels, always traveling with caravans, for fear of robbers. When they came to a river they crossed it as best they could. After more than three years of journeying they at last reached Peking. They had traversed Armenia; visited Bagdad, on the Tigris; Hormuz, at the mouth of the Persian Gulf; crossed all Persia and Turkistan; climbed the high passes of the Himalaya Mountains to the elevated plains of the Pamir region; plodded across the vast desert of Gobi; and so through all China to Peking. Their home-coming, years afterwards, was by a still longer route.

In those days, six hundred years ago, nearly all of

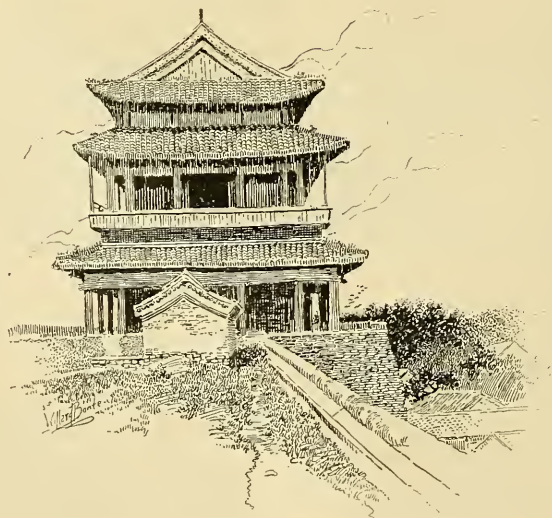


Head of Marco Polo's Sheep (*Ovis poli*).

Asia was unknown to Europeans, except the very few routes along which traders traveled. The silks and carpets of Persia, for example, had been known in Europe for more than a thousand years.

For very many years the glass- and gold-work of Venice had been sent to the East. A few European merchants had trading-houses on the Black Sea, in Constantinople, in Bagdad, in Bassorah; and there they sent their goods for exchange. Silks came to Europe from China; muslin (mosul-ine) from Mosul; calico from Calicut, in India. Our ancestors, before the Crusaders had brought back with them the spices of the East, used no seasoning in their food except salt. Pepper, cloves, nutmegs, cinnamon, etc., were unknown. Common drugs, like camphor and laudanum, had to be brought from the Orient. Most jewels came from India, too—diamonds, rubies, emeralds, pearls. The Crusades (1095—1270) opened the trade between the East and the West, and made the daily life of Europe a new thing in very many ways.

Christian missionaries had spread over a large part of the nearer East. There were bishops and churches in Turkistan as early as A. D. 334. A whole tribe of Turkomans became Christians about A. D. 1000. There were Christians in India, too, from the earliest times, and it is very probable that one of the Apostles—Saint Thomas—preached there. In the great towns of



Tower at the Corner of the Wall of the Tartar City.

Tartary a European monk (De Rubriquis) found, in 1253, Russians, Greeks, Hungarians, and even "a Frenchman from Paris." These were sometimes fugitives from justice, but oftener prisoners taken by the Tartars, who sent them to their cities to teach the arts of jewelry, weaving, house-building, and so forth.

The western half of Asia was thus not utterly unknown. But its eastern regions

Shakespeare's. Marco Polo was filled with amazement at the civilization of the Chinese.

Let us remember that the first translation of the Bible into English was made in 1382; that Chaucer, the Father of the English language, died in 1400. French was the language of the law-courts of London until 1362. A few of the colleges of Oxford and Cambridge were founded before this time, but they were monaster-



The Father and Uncle of Marco Polo Leaving Constantinople. (From a MS. of the XIV. Century.)

were quite unvisited. China was barely known by name. Japan had not been heard of at all.

These partly known or wholly unknown people were as civilized as the people of contemporary Europe, though in different lines. The Persians, for instance, were learned, polite, industrious. The Hindus had a great architecture, a great literature, poems like Homer's, plays like

ies rather than halls of learning. Matters were worse in France. The streets of Paris were not paved (as were the streets of Chinese cities), and they were unsafe at night on account of wolves and robbers. Bagdad, Cordova, Damascus, Tangiers, Samarkand, and Bokhara were seats of learning.

With these brief accounts of the state of Europe in Marco Polo's times, let us

hear what he has to say of China and the Chinese.

How the Great Khan received the Travelers at Peking, A. D. 1275.

"When the two brothers and Mark had arrived in that great city, they went to the Imperial Palace, and there they found the sovereign, attended by a great company of barons. So they bent the knee before



Portrait of Kublai Khan, from a Chinese Engraving.

him, prostrating themselves to the ground. Then the Lord bade them stand up and treated them with great honor, showing great pleasure at their coming. And next, spying Mark, who was then a young gallant, he asked who was that in their company. 'Sire,' said his father, Messer Nicolo, 'tis my son.' 'Welcome is he, too,' quoth the Emperor. Now it came to pass that Marco sped wondrously in learning the customs of the Tartars, as well as their language, their manner of writing, and their practice in war. And he was discreet and prudent in every way, so that the Emperor held him in great esteem. And so, when he discerned Mark to have so much sense, he sent him on an embassy to a country that was a good six months' journey distant. When Mark returned from his embassy, he presented himself before the Emperor, and, after making his report of the business with which he was charged, he went on to give an account, in a pleasant and intelligent manner, of all the novelties and strange things that he had seen and

heard; so that the Emperor and all such as heard his story were surprised, and said: 'If this young man live, he will assuredly come to be a person of great worth and ability.' Thereafter Messer Marco abode in the Khan's employment some seventeen years, continually going and coming, hither and thither, on the missions that were intrusted to him by the Lord, and sometimes on his own private affairs. And as he knew all the sovereign's ways, like a sensible man, he took much pains to gather knowledge, and then, on his return to Court, he would relate everything in regular order, and thus the Emperor came to hold him in great love and favor. And thus it came about that Messer Marco Polo had knowledge of, or had actually visited, a greater number of the different countries of the world than any other man."

Marco arrived at the Imperial Court in 1275. He was an official of the Court at least as early as 1277, when he was sent on an embassy to Tibet, Yunnan, and northern Burma. For more than three years he was Governor of the great Chinese city of Yang-Chow; and we know of at least three other missions of his: to Karakorum, in north Mongolia; to southern Cochin-China; and to southern India. He returned to Venice in 1295 or 1296, by sea, visiting Sumatra, India, and Persia on the way.

Of the City of Cambaluc (Peking).

"You must know," says Marco Polo's scribe, "that for three months in the year the Great Khan resides in the capital city of Cathay, which is called Cambaluc. In that city stands his great palace, and now I will tell you what it is like. It is enclosed all round by a great wall, forming a square, each side of which is a mile in length; that is to say, the whole compass thereof is four miles. You must know that it is the greatest palace that ever was. The roof is very lofty, and the walls are all covered with gold and silver, and on the ceiling, too, you see nothing but gold and silver and painting. The hall of the palace is so large that it could easily dine six thousand people; and it is quite a marvel to see how many rooms there are besides. As regards the size of the city, it has a compass of twenty-four miles, and it is four-square. And it is all walled round with walls of earth, with

a height of more than ten paces. The streets are so straight and wide that you can see right along them from end to end, and from one gate to another. Thus the whole city is arranged in squares, just like a chess-board, in a manner so perfect and masterly that it is impossible to give a description that should do it justice."

How the Khan's Posts and Runners are sped through many Lands and Provinces.

"From this city of Cambaluc proceed many roads and highways, and each road receives the name of the province to which it leads—a very sensible plan. And the messengers of the King find at every twenty-five miles of their journey a station. At each of the stations used by the messengers there is a large and handsome building furnished with fine beds. Even if a king were to arrive at one of these he would find himself well-lodged. At these stations, moreover, there are two hundred horses standing ready for the use of the messengers. In sooth, this is a thing done on the greatest scale of magnificence that ever was seen. And you must know that, by the Great Khan's orders, there has been established between those post-houses at every three miles a little fort, in which dwell the people who act as the Emperor's foot-runners. Every one of those runners wears a great wide belt, set all over with bells, so that as they run their bells are heard jingling a long way off. And thus, on reaching the post, the runner finds another man all ready to take his place, so that the new man sets off

and runs his three miles. And in this way the Emperor receives dispatches with news from places ten days' journey off in one day and a night; and that is no small matter. In fact, in the fruit season, many a time fruit is gathered one morning, and the next day it reaches the Great Khan, a distance of ten days' journey off."

How the Great Khan causes Stores of Grain to be made, to help his People withal, in Time of Dearth.

"You must know that the Emperor buys large quantities of grain and has it stored in all his provinces. And by this providence his people can never suffer from dearth. He does this over his whole Empire, according to the wants and necessities of his people."

Of the Charity of the Emperor to the Poor.

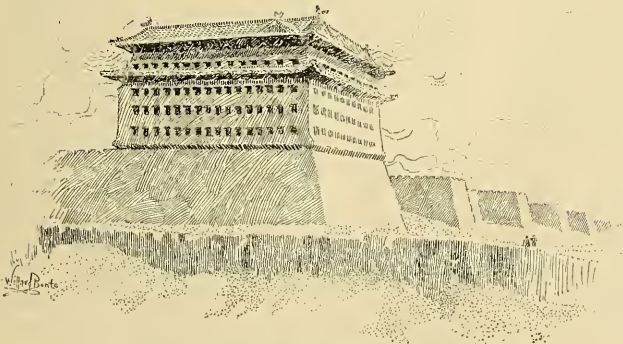
"You see, he causes selection to be made of a number of families in the city, and each family he causes to be supplied with wheat sufficient for the whole year. And this he never fails to do every year. He also provides the poor with clothes."

Concerning the Great River Yang-Tse-Kiang.

"I assure you this river flows so far and traverses so many countries and cities that, in good sooth, there pass and repass on its waters more wealth and merchandise than on all the seas of Christendom put together! It seems more like a sea than a river! Messer Marco Polo said that he once beheld fifteen thousand vessels at one time. And you may judge, if this city has such a number, how many there must be altogether, considering that on the banks of this river there are more than sixteen provinces and more than two hundred great cities, all possessing vessels."

Of the Canals of the Country.

Of the canals he says: "The Emperor has caused wide and deep canals to be dug between river and river, lake and lake,



Watch-Tower on the Wall of the Tartar City.

forming, as it were, rivers on which large vessels can ply. And thus there is communication between each city and Peking, so that great vessels with their loads can go the whole way. A land road also exists; for the earth dug from these canals has been thrown up to form an embanked road on either side."

These bits of description are examples of the manner in which Marco Polo spoke of the country which he knew so well. They were the first intelligent accounts that came to Europe of the vast Empire of China—the Farther East—and they were a revelation. They were received with a doubting wonder, and it is only within the present century that we have learned how accurate they are. In

cooked. Marco also described the mountain sheep of that region, whose horns are "a good four feet in length," and his story was doubted. But the sheep are there to-day, and they have even been named in honor of the traveler *Ovis poli*.

In another place he describes the "great snakes and serpents" of the region. "You may be assured," he says, "that some of them are ten paces in length; some more, some less. And in bulk they are equal to a great cask. The mouth is large enough to swallow a man, and is garnished with great pointed teeth." This sounds like a very large story: serpents more than thirty feet long and as big as a hog's head! But it is quite true; for the "serpents" were nothing but crocodiles,



The Gheat Khan Gives a Tablet of Authority to the Two Brothers. (From a MS. of the XIV. Century.)

his own time many of them were regarded as the merest traveler's tales.

When Marco crossed the great plain of the Pamir—"the roof of the world"—he says: "The region is so lofty and cold that you do not see any birds flying. And I must notice also that because of this great cold, fire does not burn so brightly nor give out so much heat as usual, nor does it cook food so effectually."

What an extravagant story this must have seemed to the people of Venice, who lived at the level of the sea, where water boils at 212 degrees! On the Pamir, 12,000 feet above sea, the boiling point of water is about 192 degrees, and an egg boiled there for three minutes is quite un-

which Marco saw for the first time. He discovered that the fabled salamander, that lives in fire, was no animal, but merely mineral Asbestos. As with these stories, so with others. The more we learn about the countries that he visited, the truer we find his descriptions of them.

The book of Marco Polo, the Venetian, was translated into many languages, and it was current in many countries. Columbus knew it well, and when he sailed westward to "Cathay" he bore a letter from the Pope to the Grand Khan of Tartary. To the day of his death he believed that Cuba was the Cipango (Japan) of Polo. If it had not been for Polo's discoveries, Columbus would never have started.

THE LOST BALL.

A GOLFING MEASURE FOR MEASURE.

By Edwin L. Sabin.

THE tournament of the Country Golf and Cricket Club was nearing a close. The match play had resolved into a contest between Grant Webster, son of Banker Webster, and the president of the club, and Courtney Addison, neither son of a banker nor officer in the club—simply a mighty fine fellow.

Webster was tall and dark, and an advocate of the driving mashie right through the course. Addison was tall and fair, and a strong supporter of the brassie, well lofted. And because they were both aspirants to the favor and hand of Maxine Cameron, the one affected to despise the brassie, and the other seized on every occasion to belittle the driving mashie.

The match between the two rivals was over nine holes. Webster's best score, up to this time, for this course, was forty-two; Addison's was forty-four. In expectation of witnessing a close and exciting competition, almost the whole club turned out on the grounds.

It may truthfully be stated that in all this throng of golfists, cricketers, and neutrals, Maxine Cameron was the center of attraction. The elderly women admired her natural beauty, the young women admired her costume, and the men, old or young, admired both.

Certainly, on the field, in the sun and wind, Maxine Cameron was a sight to quicken the blood in any heart. She was all in gray—a soft, lovable gray just matching her eyes—with now and then a touch of red. The sun brought out the golden glints in her brown hair, as the wind, passing, tried to carry away a wisp for a keepsake.

Whether Maxine Cameron was especially interested in the match because it was a match, or because of the players, the fact remains that she was ever to be found occupying a point of vantage from which she could observe every stroke. She impartially applauded the good strokes made by either of the contestants.

It is probable that her presence inspired the two men. Moreover, their sense of double rivalry must have contributed to spur them on, for the match promised to be extraordinarily even. Webster took the first hole, and the second, and it looked as if the driving mashie was to score a triumph over the brassie (well lofted). But Addison won the third hole, and the fourth.

For hole five, Addison was on the green in two, and Maxine had led the hand-clapping given him for his fine approach shot. Webster was short of the green with his second shot, but Addison over-putted, and both holed out in four.

Hole six was halved, too, Addison having gotten out of a bunker in a marvelous manner. Never had such playing been seen on the grounds of the Country Golf and Cricket Club.

From the seventh tee Webster and Addison drove their balls straight, and they came to rest not two yards from each other. Webster's ball being the farthest from the hole, his was the next shot.

Some of the spectators had taken it into their heads to make a circuit from the sixth to the seventh hole; avoiding the weeds bordering the course, and also leaving it free to the players. As chance would have it, just as Courtney Addison's brassie began its downward swing, that young rascal of a Willie Coots (no one could imagine why anybody wanted to bring a child to the links) started across the course about one hundred and twenty-five yards in front of the player.

Instantly a shout went up, and Addison, losing the necessary harmony of eye, foot, and arm, sliced his ball and sent it far into the rough brush.

"Hard luck, Addison," commented Webster, walking forward.

As he did so, he looked at his watch. Addison bit his lip, and, muttering something about a certain "kid" in particular, and other "kids" in general in connection with golf links, went off at a tangent to find his ball.

In the meantime, Maxine Cameron, like the impulsive, kind-hearted girl she was, had run after the Coots terror, and, having regained this youngster (frightened half to death with the intuitive knowledge that he had done some wrong), was standing in the middle of the course, comforting him.

As Webster approached near, she said, questioningly:

"You're going to let Courtney have his shot over again, I suppose?"

Webster stopped, and eyed her with seeming astonishment.

"Why, no; I hadn't thought of it," he replied. "Why should I?"

"It's hardly fair, when the match is so close, that he should have his stroke spoiled this way."

"He ought to have kept his nerve, and not have got rattled," observed Webster.

"I don't think it is a question of 'rattles' at all," returned the girl, indignantly. "Of course, he wasn't going to drive down the line and perhaps kill this child! You know that ordinarily he never slices his ball like that!"

"Well, it's a match. If it wasn't, certainly he would be allowed to try it again. I wouldn't object. But it's a match," he repeated, doggedly.

Maxine looked at him disdainfully, and waited for him to explain farther.

"It will afford him a good opportunity to show what he can do with his brassie in a hazard," continued Webster, chuckling evilly.

Maxine did not move. Finally she remarked, evenly:

"You might, at least, be magnanimous, and help him find his ball."

"With pleasure," said Webster, bowing low in mock obedience; and turning on his heel he left her.

Maxine watched him a moment, and then went in the opposite direction, leading the child and talking to him.

Presently some one cried, with glee:

"Here it is!"

And there it was, sure enough. Furthermore, it was in a nice open spot, in a very good lie, in a clearing of the weeds. Addison's bad humor fled as he saw that Fortune had done her best for him. Webster pulled out his watch.

"Too late," he observed.

"Too late—what do you mean?" asked his rival.

"It's been more than five minutes since the search for the ball began, so it is a lost ball," said Webster.

"Oh, come now!" protested the other. "Of course, it isn't a lost ball, when it's found. What difference does a minute or so make, anyway?"

"All I know is what the rules state," persisted Webster. "By rule number twenty-eight: 'A ball shall be considered as lost if it be not found within five minutes after the search is begun.'"

"I haven't been looking for it five minutes—not more than three or four. How do you know it's been over five minutes?"

"Because I happened to glance at my watch just as your caddie started to poke around in here, and it was three minutes to three. Now it's five minutes after three. I'm sorry, but those are the rules, and we're playing a match, you see."

Addison colored up in anger.

"Then I suppose you mean that I lose the hole, according to the rules?" he said, disgustedly.

Webster flushed, also, slightly, and replied, steadily:

"I don't see any other way out of it. I'm sorry."

"Shame! Shame!" cried voices in the crowd. "Give him a chance. It wasn't his fault he drove crooked."

Addison said nothing; only he slashed savagely with his brassie at a dried ragweed, and strode toward hole number seven.

Addison walked so rapidly, in his heated frame of mind, that he outstripped the body of the spectators. On ahead, Maxine Cameron saw him pacing along, and walked to meet him.

"It's detestable, Courtney," she said, encountering him, and turning to walk a few steps with him. "I never knew anything so mean. But you understand, don't you, that you have a right to ask him to show his own ball?"

Addison gazed at her wonderingly; she only smiled, and left him standing there on the putting green, while she conducted Willie Coots back to his doting mother.

"I say, Webster," sung out Addison, as the man, abandoned even by his caddie—now a thoroughly disdainful youth—came up, "just show me your ball, will you? I don't see it."

"It's right there at the edge of the green, beside that tuft of grass," responded—

ed Webster, with alacrity. "Caddie, show it to him."

The caddie sauntered over, in an arrogant fashion, and, making a brief survey, said, loftily:

"'Tain't here."

"What!" ejaculated Webster. "Not there! Why, it's in plain sight. It will bite you!"

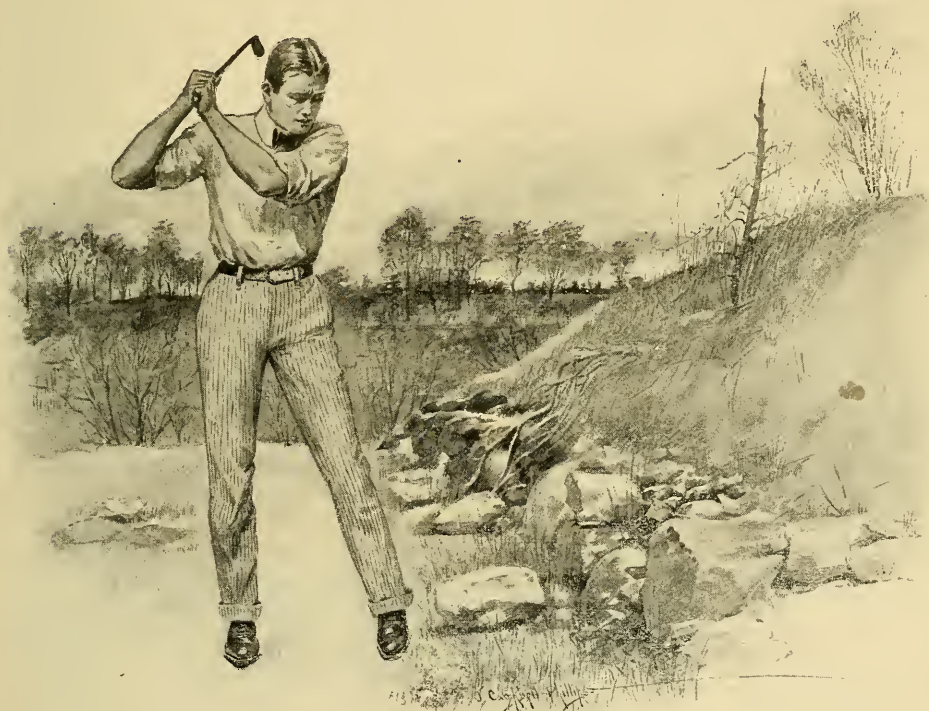
He himself stepped forward and scrutinized the place, at first superciliously, then excitedly.

"I declare!" he exclaimed. "This is

his right shoe. Some one in the circle of auditors snickered. Webster glared about him.

"If this is a joke," he burst out, "it's being carried too far! Somebody has taken that ball, or hidden it, and it's got to be produced. I'm not going to be bamboozled in this fashion! The ball was here—of course, it was here—why, the thing is ridiculous!"

"Your contention is what is ridiculous, Webster," remarked Addison. "Who was there at this point to steal your ball, or



Addison Got Out of a Bunker in a Marvelous Manner.

certainly queer. The ball was here—I saw it—several people saw it—you saw it, didn't you, caddie? (The caddie shook his head.) You did, too, you little liar. And if it hadn't been in full view, wouldn't I have found it and marked it, or had the caddie stay by it, before I went to look for the other ball?"

He paused for encouragement. Addison merely shook his head, doubtfully, as if to say, "I don't know anything about it," and then seating himself on the ground, concernedly examined the sole of

his right shoe. Nobody appears to have seen the ball, and surely if anybody had moved it, that person would have been observed. I admit I was around here alone, but I hope you do not insinuate that I could have been guilty of fraud?"

"Willie Coots and I were not far away," spoke the clear voice of Maxine Cameron. "But I assure Mr. Webster that I have not got his ball, and I suggest that he search Willie."

The sally provoked a laugh, in which Webster forced himself to join.

"Well," he asserted, "the ball is not lost. It's been what is termed by rule number twenty-two 'displaced by some agency outside of the match,' and is a 'rub of the green,' and I am permitted to drop another ball in the place where it lay, and play that, without penalty. But, you see, Addison loses this hole, anyway."

Addison jumped to his feet.

"Not much," he protested, quickly. "That rule you quoted to me some time ago has a section saying: 'A player who has lost his ball may, before giving up the hole, ask the opponent to show his (the opponent's) ball.' If it is not shown, the hole is halved. Therefore, as your ball is to all intents lost after it was found, and mine is found after it was lost, this hole is halved."

A cheer from enthusiasts in the crowd, and a hearty and delighted "By jiminy, he's got 'im," from old Barry Noxen, the club's green-keeper.

"I won't submit to it!" cried Webster, forcibly. "If that ball is not restored to me, I refuse to continue the match. I'm not to be robbed in this manner. The whole thing looks like a put-up job, that's what it does! I don't name anybody in particular—but I'm no fool."

He kicked viciously at a bit of turf. Then he leaned over in surprise.

"Oh, the cuteness of it!" he exclaimed, straightening, and pointing with dramatic effort to a spot near his feet. "Oh, what a display of cleverness! Too bad to spoil the plot, but here's my ball, people. Just see, it was so shy that it crawled into a gopher hole, and pulled a bit of grass over itself—all by its loney-loney!"

"I presume you see it?" he inquired, sarcastically, of Addison.

Addison nodded languidly, but betrayed small interest.

"Somebody must have stepped on it," he remarked. But he did not rise from the place where he had reseated himself.

"Yes, somebody did," repeated Webster, with emphasis. "Now, I suppose that you will agree you've lost the hole—and in the future I promise to keep a string on my ball. Come on, caddie."

"No, I agree to nothing of the kind," said Addison, standing up, and very much in earnest. "The hole is halved, because your ball was lost more than five minutes—just like mine, you know. And I want to say that I had nothing to do

with the disappearance of the ball, and that I believe no one had, wilfully. In addition, to be frank, I consider that you are not acting like a gentleman."

Thereupon Courtney Addison calmly slid his beloved brassie into his bag, slung the bag across his shoulder, and, turning his back on Grant Webster, walked through the astonished crowd, toward the club-house. He had forfeited the match—and the spectators applauded him.

Golf rules, though they be the law and are, therefore, to be upheld, are also to be interpreted in a spirit of equity, and any attempt to introduce chicanery, and to catch an opponent napping, as Grant Webster had evidently done by the immediate recourse he had to his watch when Courtney's ball might be lost, was rightly resented by the neighborly members of the club. The golfer's life is not to be made wearisome by the constant need of letter perfectness in all the intricacies of many codes of general rules and special club regulations, and the instinct of the members seized upon the conduct of Grant Webster to read a lesson to all whom it might concern, that equity and not hair-splitting was to be the rule of life at the Country Golf and Cricket Club.

As a further expression of sympathy, the bulk of the onlookers followed Courtney Addison, in order to press around him and congratulate him. Webster was left to go his way unattended.

"Don't you want to ride home in the trap, Courtney?" inquired Maxine Cameron. "Papa is going to stay for a game of cards at the club-house."

* * *

When the horse was slowly walking up a long hill the girl suddenly asked, naively:

"Do you think it was very wrong, Courtney?"

Addison opened wide his eyes.

"What was wrong?" he queried.

"That—that ball in the gopher hole," she replied, blushing. "He was so mean that I couldn't resist giving it a little shove with my toe!"

"Why, Maxine Cameron!" exclaimed the man.

But it was not in a tone of censure. Addison was awakened to the rapturous realization that he had won the greatest match of all.

THE PLACE OF THE AUTOMOBILE.

By Robert Bruce.

FIRST impressions of the self-moving carriage are apt to be unsympathetic, if not, indeed, acutely disappointing. You cannot help admiring the audacity of whosoever fastened his ideas of sport to the road motor; yet only on the plea of a proven capacity for distance-covering and burden-carrying can you justify its position. To the inexperienced eye it is merely brother to the trolley-car, released from scheduled service and able to follow, within its limitations, the will of the owner and driver.

This unkindly feeling is due in some measure to prejudice. It is a far step from the innate intelligence of the horse and the companionship of the dog to the blind power and mere possession of the machine.

You can share the ecstasies and the dangers of your outing with the fleet four-footer; relax attention now and then; feel that the responsibilities of the ride are not wholly yours; and trust to a discrimination in avoiding the perils of street and highway too marvelously clever to be merely automatic. But the power-driven

vehicle is wholly and directly in the care of your head and hand. You are the most independent and absolute monarch locomotion ever produced—until something happens; then no wayside beggar is so poor or so helpless.

The liking for travel by motor thrives best on a groundwork of genuine interest in engineering and mechanics. Most of our successful automobilists would make daring locomotive engineers with half a chance.

Who has not stood beside a modern greyhound of the rail, and thought a kingdom all too small a price to pay for the privilege of just once being engineer?

In real life, comparatively few of us can handle the throttle, and mow down the miles over glistening rails as the reaper passes the grain stalks behind him. But the willingness for such adventure is present in ever-increasing numbers of our people.

A very large proportion of the men and women now enrolled in the ranks of the automobilists owe their intimacy with the new sport to personal and persistent liking for just that sort of ambition. Mere

pleasure-seeking in novel forms is not enough to explain all they are doing to-day. They are simply allowing a natural instinct to assert itself.

There is constant need for vigilant nerve to make good progress with the automobile. And when mishap does come—which is frequent enough to bar monotonous driving—the personal intelligence and mechanical resource of the operator will often enable a crippled vehicle to finish its trip. Exasperated profanity in such cases is never any good—at least, not to the machine.

A love of sustained



Mrs. George B. De Forest in her Electric Park Phaeton.



Mr. H. H. Hunnewell in his Steam Automobile.

speed and endurance of motive force enlists many to whom the automobile would otherwise be unattractive and its operation tame, for outside of those named in laws and regulations there are practically no speed restrictions. The horse and span are challenged at the first mile, and left hopelessly behind in middle and long distances. The racing automobile does not become tired or diminish in pace so long as quick change of batteries or continuous fuel supplies are arranged, while its total distance capacity for twenty-four hours multiplies that of the fleetest and strongest horse at least by four.

There is a superb luxury about far-and-wide travel by motor. All other means for movement in which there is delight seem to have contributed to its being.

That feeling of independence which so consciously possesses the cyclist is present with the seasoned motorist, though, naturally, to a lesser degree. Driving strength necessary and ample to make play of the ups and downs of the ways traversed—the sensation of gliding down and of bounding up—suggests the full coach behind fresh and spirited teams. And the well-hung and properly managed land machine has something in common

with the measured sway of the yacht.

Above all else in point of real enjoyment is the feeling of being lifted up and along—carried away—rather than that of being drawn or pushed. The absence of the horse from in front emphasizes the difference for a while; then it becomes a mere matter of course. The mechanical capacity to negotiate from fifteen to thirty-five miles an hour on favorable stretches is the smallest part of it. Mere distance-covering has long since been dismissed from the list of recreations.

The best that is in automobilism comes

as the reward of experience, not the first fruit of half-hearted apprenticeship. Nor is it equally divided between passenger and capable driver. The latter is the favored one at all times. To him is the certain control of the lever and foot-button, as well as exhilaration of rivalry based on confidence in one's own familiar type of machine.

At the very outset we find the enthusiasts of two continents dividing themselves into groups according to the types they drive. It is a rivalry without distances or tapes, handicaps or rules. Lines are withdrawn from among kindreds, nationalities, and creeds, and re-established according to motive powers and operating details.

To come across the owner of a machine different from your own is inevitably to pitch a battle-ground on the spot, and thereon deepen the already unalterable convictions of each. No thought of working a change—no; only of rendering a change more than ever before impossible.

This is due more or less to the fact that the intelligent use of a motor vehicle—especially to-day—calls for vastly more than a familiarity with road rules—more

than a close study of books of instruction in care and management.

A considerable knowledge, if not indeed a technical command, of the principles of construction individualized in a favorite type is essential to so complete a mastery as will insure confidence in competition, and this can be gained only at the expense of earnest personal application. In such soil enthusiasm takes root.

Electric, hydrocarbon, and steam powers are already successfully established in use. But their specialization is only beginning. Each has highways and byways to be explored, theories to test and sift, and principles to be demonstrated. This important work falls not only to the professional designer and builder, but to all whose interest prompts either suggestion or co-operative effort.

Individual enthusiasm may take hold where it wills, and go where it chooses. Recognition quickly follows the practical, and the rest is soon smothered in good-natured candor. And that difference in opinion which among sportsmen means a vigorous rivalry on existing lines, with now and then a distinct forward step in the perfection of mechanical forms, has free course.

The willingness to meet and the will to overcome any and all troubles—real or imaginary—are so marked among enthusiasts, that features of questionable worth are not, in many cases, discarded as soon as they might well be. There is, especially on the European Continent, a general liking for those types of machines which depend most upon the skill of the operator, and the least upon handling by rule, for their successful speeding. A premium is placed not only upon mental and mechanical dexterity in management, but also upon careful and accurate judgment in such prosaic matters as equipping and refueling.

In very truth, one reason why the electric vehicle has not been developed in France as rapidly as it has in the United States is because of a decided preference there for propelling powers more directly under the eye and care of the operator. Within the strength of its batteries, this type of machine needs far less personal attention than any other—a feature appreciated by many, but not by all.

The summer of 1900 may be said to have marked the entry of the automobile into the ranks as an important factor in recreative life in and about the popular resorts of the North Atlantic coast. Favored by vastly increased interest in their construction and operation, and encouraged by roads much better than the average in this country, there has been a veritable multiplication of machines of all kinds within the past twelve-month.

In addition to the numerous models of American production, one or more representatives of every approved European type have been brought over by enthusiasts, so that our assortment of self-propelled vehicles has now become the most complete in the world. The high-speed motor purchased in France by W. K. Vanderbilt, Jr., for \$9,000 was designed expressly for record-making on Conti-



Mrs. Clement C. Moore in her Electric Automobile.

mental highways, and is unlike anything heretofore used on this side of the Atlantic. Among other accessions have been winners of some of the most important automobile racing events abroad.

It is a notable fact that our importations are principally racing vehicles, and our exportations principally pleasure carriages. Naturally Newport, being the most fashionable summer gathering-place of our wealthy and leisured classes, would contain all the most varied and advanced specimens of the automobile, and by the courtesy of their owners OUTING is able to reproduce the accompanying illustra-

its impulses have constant need for that quality of faith which confidently strives toward results not yet specifically foreshadowed. The leaders in the effort are to a large extent men and women of experience and training in wholesome pastimes, worthy of being trusted to do in a sportsmanlike manner whatever they undertake.

To them the new types of road machine clearly appear as valuable accessories to all outdoor life, to be developed as much for their possibilities of useful ministry to other sports as for their own sake. They know the limitations as well as the main certainties in the development of the automobile.

It is certainly under a favorable sky that another means of pleasure transit is being added to our already known list. To precede a new departure with a deep popular conviction that it is due to come, and certain to broaden to many-sided usefulness, is to endow it with that strength and vitality which lends wings to progress. The wheat is sooner separated from the chaff, standards more opportunely adopted, and less breeding-ground for unhealthy growths exposed.

The road motor is saved in advance nearly all the adverse conditions which greeted the advent of the bicycle, and all the forces of advanced and diversified industry are at the command of the designer and builder who calls upon them to reinforce or exemplify his work. With rare openness of mind, suggestion and offering

are alike received; only the crude and the ridiculous fail of respectful attention.

The automobile has already earned its right to be classed as another of our means of recreation.

The position of the automobile and its relation to society uses are at present in a stage of uncertainty, but its solid advantages assure it a place of importance as part of the establishment of every man of means. Exactly what position it will ultimately occupy it is only now possible to speculate on. Possibly it may in the end be the distinguishing mark of social



Mr. Foxhall Keene on his Motor-Tricycle.

tions of some of the most important of them. But Newport is simply in the van of a large procession. At the New England and Jersey coast resorts, at Saratoga and Lake George, by the side of the Great Lakes, and in the mountains and country East and West, this new form of pleasure travel is gaining rapidly in popularity.

It must necessarily be some time before automobilism finds its sure and proper place among the sports of the times. Even those to whom its progress is to-day indebted for the best and most healthful of



Master DeForest in his Electric Runabout.

grades and affluence, much as the private equipages and cavalcades of the early centuries were the outward and visible signs of the rank and wealth of their respective owners.

Much will depend upon the condition in which the main high roads of the country are kept. If these are brought, over wide areas, into a condition which will en-

died out when the railroad took other routes. The automobile will circumvent this, because by its increased capacity to cover distance it will enable travelers by it to reach towns farther apart and provided with hotels capable of appropriately entertaining such guests. For instance, in going south from New York, Philadelphia and Washington would be by no

means out of the capacity of a day's trip between each, and so on in many other directions.

Indeed, given good roads there is no apparent limit to the use, or usefulness, of the automobile; for if every mile of a long journey could be performed with the comfort that comes to one at the end of a dusty, hot, stuffy, foul-smelling ride by train, when the railroad carriage is exchanged for the private landau, who would submit to the conditions which are inseparable from the commercial locomotive?



Mr. Royal Phelps Carroll's Gasoline Phaeton.

WHEN JACKSNIFE COME OUT OF THE NORTH.

By H. S. Canfield.

WHEN the nights of late August grow cool in the Mississippi valley, and in the lower places there is a tinge of frost in the morning, the jacksnipe comes down from beyond Superior and pauses in his southward flight.

One morning, and on all the wide brown fields and shallow marshes there is no sound or hint of foreign bird-life; the next, the harsh "Scape! Scape!" rattles upward before the foot of the hunter. Where yesterday a snipe would have been the last thing looked for, to-day it is the commonest thing in view. A month later there will be no sign to show that the wanderers have been and are not. Into the mysterious night they vanish, as they came out of it, and the land, which was made full of tiny holes by their exploring bills, will know them no more until the seasons swing round and once again the grasses grow brown and late flowers struggle against the first chills of winter.

It is a characteristic of the jacksnipe that in going south it follows the courses of the large streams, and in coming north it does not. In this it exactly reverses the routes of the wild fowl, which spread out over the country to considerable extent in seeking a warmer southward climate, but in returning to their northern breeding-grounds follow the lines of the running waters perforce, since they are first to be freed from the grip of the ice.

The jacksnipe seldom does anything that is to be expected of it, with the exception that, like other birds much hunted for sport, it nearly always rises against the wind. This rule may be laid down concerning its conduct, but no other can. Why it comes all at once and goes all at once; why it sometimes passes over land well suited to its wants and pitches upon country that affords it not one-half the sustenance to which it is entitled; why, on clear, warm days, when it can see and hear well, it will lie in the grass almost until stepped on, and when the sun is hidden and violent winds blow and locomotion is both difficult and disagreeable, it becomes as wild as a startled buck up-leaping from invaded undergrowth, no

man may say. It is obstinate, self-willed, erratic, and impudent, because it was born so.

No northern section of the United States affords the jacksnipe shooting to be had in the bird's winter home along the Mexican Gulf; yet there is a space of time between the middle of September and the middle of October when, along the upper reaches of the Mississippi, one may make a satisfactory bag of this delicious and tempting game-bird, provided that he has the industry to seek it and the necessary capacity to bring it down when it starts to corkscrew its way to safety.

The ten thousand islands in the river are its favorite haunt. It makes a stopping-place of them on its journey to a softer clime, because there it is apt to be free from the heavy shooting which greets it in the neighborhoods of the big cities, and because in the soil of these islands there is a plenty of the food which it most likes. It would be difficult to find more picturesque surroundings for the sport, or a place in which the sport itself is more genuinely enjoyable. To the westward of the long, crooked water-line tower the bluffs of the Iowa shore. Straight upward, one hundred, two hundred, three hundred feet, they go, swathed often with deciduous trees to the summit. In early autumn these trees are painted by the brush of the frost. Sometimes the colors run in parallel bands one above another; sometimes they are laid on in irregular streaks or blotches; sometimes they are sprinkled indiscriminately from top to bottom, and shine and rustle and gleam for miles.

On either side of the island runs a clear, cold swift current. Overhead a duck-hawk sails stilly. Down stream a flock of teal whistles along, putting one hundred and twenty-five miles an hour behind it with no apparent effort. A huge blue heron rises with a squawk and sails away, his long legs streaming behind him like a tail. Maybe from the wild rice which grows along the edges of the inlets comes the incessant foolish clangor of the rails.

The basis of an island of the Mississippi is drifted sand. As the years went on, after its first formation, it got several deposits of better soil from the overflows of the river. This soil was added to by the rotting vegetation, which sprang up almost immediately and became rich. Finally, it showed five feet of extremely fertile land upon a sand substratum. In its center a lake always formed, waist-deep in the middle, five hundred yards across by a thousand yards in length, grown up near its edges with water-grasses, containing seeds and such things in plenty, and ringed around at a distance of one hundred and fifty yards by a growth of willows and other soft-wood trees, making the lake invisible from any point save one near to it, shutting it off from the rest of the world, and causing it to be a tempting harbor to winged wanderers in search of food and quiet. The land about is soft, and it contains plenty

of larvæ, worms, and other morsels in which the snipe delights. Consequently the birds affect them much. The man who, in proper frame of mind and properly armed, approaches this sort of water is certain of a good bag.

The strip in which the snipe are found is not more than fifty yards wide and runs all around the still water. It is covered with short, wiry grass. The ground is soft, the foot often sinking in over the

ankle and sometimes up to the knee. The birds flush at distances of from ten to twenty yards, and generally start toward the lake, intending to cross it. If the man with the gun wears hip-boots of rubber he will not need a retriever, as the water is not more than eighteen inches deep. Almost always the shots obtained from birds immediately sprung are right or left quarterers; only occasionally a straight-away is had. There are no high bushes to disturb the sight, and no hummocks

behind which the bird may dodge. It is open shooting, and a fair contest between the quickness and accuracy of the individual and the speed and flight-erraticism of the bird. There are men who tell tales of bagging twenty-five to thirty jacks straight, but they are self-confessed phenomena, whose only trouble is that they shoot too well. The sportsman who, under the most favorable conditions, is able to make an average of 50

per cent., exhibiting twenty-five dead birds for a half-hundred expended shells, has no cause to be ashamed.

It is probable that in a group of a half-dozen experienced men no two of them will agree as to the speed of the jack, for it is most difficult to estimate. It is probably true that in covering a hundred yards it will require slightly more time than the quail. It is certainly true that in traveling a hundred yards from point to point



Where the Birds Lie Close.

it flies quite a hundred and twenty, or possibly more. Its wide and repetitive swing, its crazy dartings from side to side, and not infrequent alteration of its height above the ground use up a lot of space and cause it to be one of the most difficult of our flying targets.

Rules for shooting the snipe have been laid down by many field-lovers, from those who lived and loved a century before "Frank Forester" was born, down to the present. Most of them say that deliberation is essential, and that, if waited upon, the jacksnipe will steady itself after a flight of thirty yards and offer a more possible mark. Prominent among those who advocate this method of bagging *Scolopax* is Maurice Thompson, who has had not only many experiences, but tells of them in a fascinating way. Yet nothing can be plainer to the observer than the fact that in nine cases out of ten the jacksnipe does not steady himself, and that the twisting, darting feature of his manner of going is preserved from his initial spring until he pitches. Indeed, birds which are flying high in air, determined to cover a mile or so before alighting, frequently have more "wind" to them than the short-goers.

There is a time—a portion of time almost infinitesimal—when the snipe is

walks down the semi-gale. The snipe flushes fifteen yards in his front, or twenty, or even forty. It makes no difference, so far as the possibility of the shot is concerned. For from ten to fifteen feet it rises against the wind, and so comes toward the marksmen. When it has attained a height that it judges to be sufficient, it wheels in a circle not above two feet in diameter and goes down wind with the speed of a bullet. At the moment of turning, or just before the turn is made, the target is practically stationary, with wings stretched to the full expansion, head bowed, and bill lying flat against the breast. That is the time to pull the trigger. As it is not a longer time than a fourth of a second, the trigger-puller must have clear eyesight and nerves which telegraph to his brain instantly and without failure. All of the phenomenal jacksnipe scores I have ever known have been made by men who shot in this wise. Under ordinary conditions—that is, barring the high steady wind and open country—they shot no better than people who never get their names into print, and would feel alarmed if they saw them there.

There is one form of island shooting of snipe that is peculiarly attractive, in that it has good fellowship about it as well as marksmanship. The man who first sighed for a lodge in some vast wilderness was not a sportsman. There is some satisfaction in a long, lonely day if the shooting be good, but much more if there be a companionable chap along. If one makes a good double it adds to the geniality of things to have a witness to it, and watching the other fellow's misses is some balm to the hurt feelings which come from our own. Two men on a Mississippi island out after snipe on a blowy, cool, inspiriting autumn day can have just twice as much fun as one.

Arriving at one of the little lakes in the island centers, they start around it in opposite directions. The birds will not leave the territory until shot at for an hour or two. Consequently, any bird flushed and not stopped by one of them is certain to swing across the water, and is apt to give the other man a chance. In this way the shooting varies from the steady flushing and firing at targets which have their initial speed, height, and mode of progression.



The Golden Plover.

steady. It occurs only in a high, smooth wind. The man with the gun, every sense alert, and holding his weapon so that he may bring it instantly into use,

If the jacksnipe which has just bounded from the grass and zig-zagged away is a difficult mark, it is not to be compared with one which is coming down wind, thirty yards high, traveling more than a hundred miles an hour, and describing a succession of swings which would measure ten feet across if there were any way of putting a tape-line on them. The mark

is small; the shot, being pitched upward, are more subject to wind-drift; they lose force in proportion as they fly upward, and the bird itself is going so fast that if it be crossing a liberal allowance of hold-ahead will be needful, even with the quickest of the nitrate powders. It is nice to see the twisting, darting, half-whirling little demon check in air five feet above the brown carpet under him when he is writhing straight away, but the satisfaction of killing him so is not to be compared to that which comes when he somersaults down from his height forty yards away, and throws up the water of the little lake, as if a ball had struck it. Snipe so going are more difficult to stop than teal from a blind, just as in proportion they are smaller and more irregular of flight.

There are old-fashioned shooters in the West who, when after jacksnipe, still stick to three and a half drams of powder and an ounce and an eighth of No. 7 shot in a 12-gauge gun, but the younger generation prefer



An Island in Process of Formation.

the lighter load and smaller pellets. They do just as good work—maybe better—and their heads are not jarred loose at the end of a long day, and their right cheeks are not swollen, and their arms show no blue-and-black spots. The improvement in explosives, and in the method of dropping shot, render the former herculean charges unnecessary in grassing so tender a bird as the jack.

It is not a hard flyer to stop when hit. A January quail will carry four times the amount of lead. The trouble is to hit it. Three drams of powder behind two pink-edged wads and an ounce of chilled No. 9 will be found ample if the gun be correctly held.

Early in the season, when the birds are just down from the Canadian lakes and marshes, No. 10's are large enough. As the nitrate powders have lessened the quantity to be used in propulsion, so they have obviated much of the old "holding ahead" that was as much a part of the

faculty of the successful gunman as his eyesight. It is still needful to lead a crossing bird, but not to anything like the distance that used to fill bags. Twenty years ago, when all water-shooters were using FF black powder, that had much penetration as an offset to its slowness, it was not uncommon to lead the buzzing teal by twenty-five feet when he went past and thirty yards away. Personally, I have pulled trigger on the lead-



Typical Slough of the Upper Mississippi.

ing bird in a flock of fifteen at that distance and knocked down the last one in the bunch, which could not have been less than forty feet behind its foremost mate. With the nitrates there are no imaginable circumstances in which it would be proper to lead any bird more than ten feet, and this can be cut down to five if the gun be swung sharply along the line of flight. In shooting incoming jacksnipe, which seek your bank of the lake and are going by at thirty yards, three feet of leading is apt to prove enough.

A decent spaniel or setter, which will



Upland Plover.

retrieve quickly and come to heel, is sometimes desirable, and by his aid two dozen brown, beautiful gameful night-wanderers may be obtained on almost any morning or afternoon of an early autumn day. The ring of willows, oaks, and ash trees stands in a glory of gold and green and crimson. The still water flashes in the sunlight. Above its flat surface the crack of the gun swells to reverberation. Overhead the sky is as blue as a maiden's

eyes. The steady murmur of the river, down rolling to the sea, comes to the ear faintly. As the sun sinks behind the great bluffs to westward, their massive shadows march on the water and plain as if with leveled spears. Perhaps from the center of the lake comes the clangorous call of a quartet of mallards, advance guard of the hosts which are to sweep down later. The limbs may ache from prolonged exertion, but there is comfort in the weighty feel of the old coat as it drags about the hips; and when the legs are stretched in the boat and the pipe is lit before the swift row homeward, what man would ask for more?

Last year there was a marked decrease in the size of the snipe flight, and this was true notably of the Mississippi Valley. The commonwealths which permit spring shooting are responsible for this. Until such States as Illinois swing into line for common-sense and decency there is not apt to be much improvement. A little way south of the great city of Chicago, for instance, lie the Kankakee marshes—good snipe ground, fine ground. A half-dozen clubs have their houses on it, and on any fine spring day a hundred guns are cracking at the jacks, declining to permit them to rest on their long journey to their breeding grounds. The spring shooting along the Kankakee is getting to be poorer, of course, and so is the fall shooting—a natural result of this policy. If the "sportsmen" composing this army of unsportsmanlike hunters were the only folks to suffer, little would be cared. Unfortunately, they injure above and below them every man who likes snipe-shooting, but is able to keep his appetite within fair bounds. It is a fact that one day of shooting in the spring will do more to distress the birds, to drive them elsewhere, and to lessen the succeeding crop than five days of shooting in the fall or winter. It is impossible, however, to penetrate the Illinois solon with this apparently self-evident fact, due possibly to the further fact that the Illinois solon is peculiarly dense.

THE PASS OF THE TÊTE NOIRE.

A DRIVE INTO THE ALPS.

By Mildred I. McNeal.

FROM the summer beauty of Lake Geneva, southward among the mountains, passing many an old castle and empty monastery, and following for miles the course of the hurrying Rhone—so it is that one approaches Martigny, the Swiss gateway of the Tête Noire Pass.

The Alpine environment is not pronounced here—one has no suspicion of the glories that lie less than thirty miles away. Martigny has one attraction, and only one. Upon a lofty hill at the south rises straight and untouched, amid the castle ruins, the old tower of the Bishops of Sion, La Batiaz.

Thither the traveler bends his steps, threading streets that have a flavor of Italy and a hint of France, but scarcely a touch of clean, quiet Suisse. Crooked and

dark, and lamentably dirty they are, and the trip grows no pleasanter at the sharp turn to the left up the castle hill. The little daughter of the castle-keeper comes out with the key. She is a dark, Italian type of child, and she understands poorly the French we greet her with—is it her fault, we wonder, or ours—but we follow her bare, brown feet along the dry sunny road that zigzags up the slope among the vineyards, or take short cuts up the stone terraces among the vines themselves. At last the summit—and the old brown-yel-

low ruin is close before us. The hall, the chapel, and the kitchens lie in wreck, but the tower invites one to climb.

From a niche in the wall, the little guide takes forth two apologetic candle-ends, and, carrying one herself, and intrusting the other to our rear guard, we begin the ascent. The stair winds round and round in the thickness of the wall, narrow loop-holes on either side giving glimpses, alternately, of the country and of the central well around which the tower is built.

From the top the crooked and common town shows a little more plainly its wandering streets, but the Alps are no nearer. At the edge of the masonry grows a flowering bush of yellow, and, with a bunch of its blossoms for our Alpine herbarium, we climb down again, following the ghostly light and pattering feet of our



The Brawling Trient.

child guide, and so reach, not without relief, the broad day once more.

On the morrow the castle is the landmark we look back for, time after time, as our carriages wind slowly up the mountains. Often we think it lost; as often we climb to another view of it. Toiling slowly up, we pass many a lonely chalet, hidden on the slope below the road, the broad roof laden with stones and almost meeting the ground at the sides. The children of the peasants, dark-eyed little girls and boys, come out with cool

goat's milk to tempt the centimes from our pockets. It is a hot, slow ride, and we are not sorry when, at broad noonday, we lose the far-away tower for the last time and reach the summit of the pass.

The Alpine splendors now begin to



The Pass of the Tête Noire.

break upon us. From the "rest," where our guides pause for their hourly refreshment, we descend by a road so steep and straight and startling that we think its end leaves us surely at the bottom on the other side. A short turn and a long ride over the level green of the valley bring us to the hotel where we are to lunch. We are now surely in Switzerland. The mountains, grim and steep, tower close behind the house. In front, a brawling brook, milky-white with the sediment it dashes along with it, hurries down the way we have come amid a confusion of boulders. And standing on the rustic bridge, looking back, snow-capped peaks gleam up between the lower and darker hills near at hand.

We fancy it the bottom. But we are to be deceived more than once on this day of wonders. Our carriages wind on after lunch, over the green for a little while, and then straight out along a dizzy precipice. At the bottom of the valley, hundreds of feet below, brawls the stormy Trient, and just beyond, or so it seems

in this land of magnificent distances, its echoing chasm joins the great black gorge of the Eau Noire. The sheer mountains across are dark with forests and silver-stitched with white waterfalls, small from distance. And we ride on, not wholly at ease in our lumbering conveyances, especially when we meet other travelers having the right of the road, and are obliged to draw out very close to the bristling slope of the rock and tree-tops just below.

After many miles we gain the level. The valley is wider now—there is less of the bright green pasture, and far away the fields have a brown-purple look suggestive of Scotch moors. We cross L'Eau Noire and enter the charming land of France, expecting every moment, in our ignorance, to see Chamounix at some turning of the road. The mountains begin to open; sharp, shining needles of snow are thrust up into the cold blue sky, miles before us, and the rapidly setting sun lends its dusk to the wintriness of the scene.

Suddenly, with little warning, we come out again upon a wonderful eminence. The slope below is gradual, and the broad, white roadway is all in view, loop after loop, like the winding of a silver ribbon dropped from its spool.

Who shall describe what is across the valley! Stupendous bare brown slopes, steep and forbidding, are cut at wide intervals by rugged mountain-heads, and upon the slopes, splintering and shivering and heaving down, are three great glaciers. The eternal hills close in about us as we skim down around the broad curves and along the exquisite level roadway that leads for miles through the valley to Chamounix. Upon the way we pass wonders. Terminal moraines, gray with sediment, and heaped with worn boulders long since torn from the hills; fretful streams, white with stone dust; steep wooded reaches on either hand. At the end of the valley rises the majestic monarch, and we are enchanted to find that the chalet which the hotel has assigned to our party looks straight across the green fields toward his glorious front and the ever-narrowing glacier, that

lies like a woman's white and beautiful finger among the dark mountain woods.

To the trip over the Mer de Glace, which every Chamounix visitor takes, no pen can do justice. The tortuous mule-trip up the mountain; the still more tortuous walk, first across the ice that throws its

ing, of the glacier fall; or our helpless isolation upon the crest of the mountain, with an ocean of billowy mist creeping to the very edge of the cliff where our path lies.

On the second day thereafter we travel away down the shining valley, leaving half its beauties unseen. This drive is



Mont Blanc from the Brevent.

December chill into the very midst of the summer about; then over the sand and boulders, and brooks and débris of the lateral moraine; then down the treacherous Mauvais Pas, clinging for life to the rod which follows the troublous path, half stairway, half goat-track, that skirts the well-nigh perpendicular face of the mountain—all this defies description. It cannot be given to the untraveled to imagine our unquiet awe as we gaze into the frozen blue chasms, crystal and shin-

better, if possible, than the one over the pass from Martigny. For miles, as we follow the tumbling Arve down its gentle slope, the long snowy splendor of the Mont Blanc range shines full upon us, lighted by the sun of a perfect morning. Just over the crest lies Italy; but even Italy, poet of the nations though she be, has nothing to compare with the glory of this green valley, lying, in its thousand beauties, down before yonder everlasting throne of glistening white.

THE SUMMER THAT PASSES IS GONE FOR ALWAYS.

By Elwyn Irving Hoffman.

Full fair is the earth, but the Winter will come;
My heart singeth now, but it soon will be dumb;
For short is the life of the bloom and the leaf.
The life of the heart is as passing and brief.

Be happy, ye birds! Be industrious, bees!
Wave gaily, ye blooms, in the shine and the breeze!
Sing, heart; and toil, heart; and dream, soul, as you may!
The Summer that passes is gone for away!

THE REAL CANOEING.

By R. B. Burchard.



The Sliding Seat.

CANOEING is many-sided, like the mother nature from whom she sprung. Her devotees are racers, cruisers, campers, hunters, and boat-house habitués.

As the requirements for racing have become more exacting because of the proficiency of the few, many have withdrawn from the ranks of racing-canoe sailors.

Every one went into the races in the early days; now the racing coterie may be numbered upon one's fingers. The weeding-out began when Vaux invented the stationary deck-seat and tiller—that was about 1882—and the climax was precipitated, about four years later, when Paul Butler introduced the sliding seat. After years of elaboration of reefing and lowering sails, standing sails which cannot be lowered or reefed were adopted; after patent folding centerboards galore were brought out, the old-fashioned plate-board came back to stay. Finally, the well or cockpit was done away with save for a hole the size of a cheese-box sunk into the deck for a depth of six inches—a receptacle for loose lines, and at times a place for the skipper's feet. No comfort-abiding citizen wants a boat which he cannot get into, and so this last racing device permanently divorced the racing-machine from the cruising family.

This is all narrative of ten years ago. Since then there has been no change in canoe-racing except its decline in popularity. Canoeists are by nature inquisitive, exploratory, and creative. As long as there was anything more to contrive, the original sailing sharks held on. The end reached, interest waned.

The boats are better now than ever before, but generally the same as those of ten years ago. Mr. Archbald's *Mab*, in which he won the American Canoe Association trophy this year, is a boat that has seen five summers' racing, and was pictured and described in *OUTING* of June, 1897.

This decline in the racing interest was foreseen, and what was prophesied has come true. Meanwhile, the racing yachts have been pursued by the same Nemesis, only, in their case, the game is bigger, the process slower. With them the end is not yet reached. Where will it lead? Who knows! The divorce, however, of the racing yachts from the pleasure fleet is already complete, and the cup-hunters fewer in number. The rule-makers have racked their brains to retard the development of the racing-machine; but, alas! high perfection on lines of limited usefulness, and increased expenditure of money, are the inevitable results of continued competition.



Mab—Champion Canoe.



New York Club Camp at the Association Meet.

Not only has there been no advance in canoe designing, building, or rigging during the last five years, but no increased ability in the handling of the canoe. In records of sailing races, we obviously cannot make comparisons by elapsed time, as in track athletics. If you would estimate the skill displayed in sailing races with big or little boats, note how the mark-buoys are turned.

If the yachts are coming up on the wind, note if they are close hauled with sheets down snug, or if, on the contrary, they have overreached on the previous tack and are approaching the buoy with sheets eased off.

If sailing down the wind, notice if the boats luff around close to the buoy, or drift away off to leeward. And, in canoe races especially, note if, in turning, the boat stops at the buoy, her sails flapping in the wind while the sailor fusses with his sheets and cleats while trimming in. In these nice points of sailing I cannot see that the work of five to ten years ago by Ford Jones, or R. W. Gibson, or Paul Butler, or C. B. Vaux, has been excelled or even equaled.

As with the sailing, so with the paddling races and other contests at the Association Meets and at the club regattas. There are usually a number of entries in the paddling races, but the real struggle for the trophy is between two or three trained men. There are about thirty events on the regatta programme at an annual meet, but, except in the four or five

of prime importance, the honors are easy and the interest slight. At the annual Meet this August scarce a dozen persons were attracted from the enjoyments of the camp to view the struggle, the races the while being well contested and spirited.

The most important events in the canoeing year are the A. C. A. trophy races for sailing and for paddling. These were won, respectively, by Charles E. Archbald and R. R. Woods, both of Toronto. Mr. Archbald was closely pressed in the trophy-sailing race by F. C. Moore, of the New York Canoe Club, when the latter's sliding seat split from end to end.

Mr. Moore won the Dolphin trophy, the prize most sought for after the A. C. A. Cup.

Mr. Archbald also won the sailing race for open Canadian canoes. This race is intended in a measure to offset the competition of the racing-machine. It has served to elicit a remarkable display of cleverness in putting to windward boats of the birch-bark model. These are built of thin planking of bass-wood and weigh less than fifty pounds. Fitted with leeboards, as shown in the photograph, they go into the wind with wonderful directness and speed for such a type of boat. They are sailed, like the St. Lawrence skiff, without a rudder; shifting the weight of the skipper forward or aft brings the boat into the wind, or pays it off. Having won the sailing trophy for four years out of the last five, Mr. Arch-

bald may fairly be called the champion canoe-sailor of America, and that means of the world.

The record paddling and sailing races, which are supposed to bring out ability of both kinds, were won by G. W. McTaggart, of the New York Canoe Club.

The relay race for open canoes with single blades, passing an article or a dispatch on from man to man, was won by E. McNichol, R. N. Brown, and A. McNichol, of Toronto.

The hurry-scurry race, including a run, a swim, a paddle, and a portage, was won by A. Lynch, of Britannia Bay, Canada. The paddling and sailing combined race was won by J. W. Sparrow, Toronto Canoe Club. The paddling race with double-bladed paddles was won by H. C. Allen, of Trenton, N. J. The prize for club

terests being supervised by a Board of Governors.

The purpose is for the divisions each to take the annual Meet in turn; but for the last six years these camps have been in the Thousand Islands or near the Canadian border. This year the Meet was held on Lake Muskoka, about one hundred and eighty miles north of Toronto. This district was the home of the Huron Indians, and in this vicinity that ideal canoeist the Chevalier de Champlain organized an Indian expedition against the Iroquois south of the St. Lawrence. The whole country bristles with natural beauty and primitive romance.

There were about two hundred canoeists at the Muskoka camp, with a fair proportion of ladies and children. Under the able management of Com-



Charles E. Archbald Winning Open Canoe Event.

fours was carried away by the Britannia Bay Canoe Club, and the great contest for war canoes was won by the crew of the Torontos. These are only some of the more important events on the racing programme, which was long enough and varied enough to display all points in canoe-handling.

Organized canoeing, as represented in the American Canoe Association and the leading clubs, is about as it was a decade ago. The Association is not a representative body, but an organization of individual canoeists scattered all over the country. Its roll comprises about twelve hundred names, divided into four divisions—Northern (Canadian), Eastern, Central, and Western—each with its own staff of officers and committees; the financial in-

modore W. G. MacKendrick, of Toronto, the camp arrangements were very satisfactory. The exacting duties of conducting the races were fulfilled to every one's satisfaction—an unusual condition of affairs—by D. B. Goodsall, of Yonkers, N. Y.

The annual Meet of 1901 will be held somewhere in the Thousand Islands of the St. Lawrence, and the newly elected Commodore is C. E. Britton, of Gananoque, Ontario. The Commodore is the supreme authority, not only in the Northern division, of which he is a member, but in the management of the general affairs of the Association. The new vice-commodores who command the divisions are: Atlantic division, H. M. Dater, Brooklyn, N. Y.; Central division,

Charles P. Forbush, Buffalo, N. Y.; Eastern division, Louis H. Hall, Newton, Mass.; Western division, William C. Jupp, Detroit, Mich.

Though the canoe clubs have no formal connection with the Association, the great camp at the Meet is for the most part made up of club camps whose members vie with one another in making their several households attractive and hospitable. The original practice of individual cooking has long ago been done away with, all boarding now at a general table.

The number of really active clubs is probably about the same as it was a decade ago, though the list has been more than doubled. There are forty-seven clubs on the list of the Canadian division, although only thirteen have reported the

tons, Red Dragons of Philadelphia, etc.—these are all enjoying a dignified but inactive old age.

In the temporary abatement of the racing ardor and general apathy among the organizations that were most prominent a few years ago, lies the basis of the erroneous impression that the sport of canoeing is moribund. The fashion for club organization and display is on the wane, perhaps only for a time; but the use of the paddle and the tiny sail is more universal than ever.

Where one large club has fallen into a state of lethargy, a dozen small ones have sprung into activity. In the vicinity of Boston, for example, there are a dozen canoe clubs, large and small—the Puritans, who last winter opened a new and



Winning War Canoe of Toronto.

names of their officers. In the Atlantic division there are thirty-two clubs; in the Eastern, twenty-six, and in the Central division, sixteen. Of the old clubs, the Toronto and the New York Canoe Club remain the largest and strongest, the former owning a fine boat-house and having an active membership of 300, and a fleet of over a hundred canoes; the latter occupies a comfortable and spacious shore property on Gravesend Bay, and a membership limited to 125. Its fleet comprises 100 canoes, a one-design class of knockabouts, and thirty-five yachts.

The other clubs which were most active in the palmy days of canoeing—the Mohicans of Albany, the canoeing contingent of the Vesper Boat Club of Lowell, the Hartfords, Springfields, Rondouts, Newburghs, Knickerbockers, Tren-

commodious house on the South Boston shore, with sixty active members; the Warbewawas of Auburndale, famous for paddling races in war canoes and club fours, with fifty members; the Newton Boat Club, with 180 canoes, nearly all paddling; the Dedham Boat Club, with about seventy-five canoes; the Boston Athletic Association, with fifty canoes; the Ninotou at Woburn, the We-no-nah at Riverside, the Quinnobiquin at Dedham, the Lawrence and Medford clubs, etc. You will seldom find these clubs the subjects of news items, but visit their houses on any evening in summer and you will find canoeing in its vigor.

The real popularity and strength of canoeing, however, will be observed in the unorganized and individual canoeists, whose name is legion. Ask any of the



F. C. Moore, Winner of Dolphin Trophy.

builders if their trade has fallen off, look in the club books and sporting periodi-

cals, and see how their advertisements have increased, a sure indication of a prospering trade.

Search the woodland rivers and you will find canoes sprouting like lily-pads. Bar Harbor is full of them—picturesque birch-barks—death-traps when in the hands of the unskilled “summer boarder”; the Charles is alive with them; the Merrimac, the Connecticut, the Hudson, the Delaware—all the rivers know them, though the sporting editor of the daily papers and the club secretary know them not.

Is canoeing dead? Not while trout-streams ripple through the calm of overhanging cedars, or the elusive flight of antlered trophies lures men into the recesses of the forest; not while purple hill-tops are mirrored upon hidden ponds, nor while restful rivers pass the homes of tired men. Always there will be those for whom the paddle is a talisman.

FIRST LESSONS IN DOG-BREAKING.

By H. B. Tallman.

THERE are men who care for a dog only because it is of assistance to them in hunting, and killing birds; but the true sportsman loves and appreciates the dog for its beauty and intelligence about home, as well as for the possession of points and qualities which fit it for the best class of work in the field.

The dog is the most important part of a sportsman's outfit; but many men who consider themselves thorough sportsmen have never studied the subject of dog-breaking and handling sufficiently to enable them to bring out the animal's best work, or to handle another man's dog in proper manner.

It is easier for a dog to contract bad habits in the field than it is to break him of them after he has been hunted by men who are strangers to him and to his master's methods of handling; and it will be to the advantage of the beginner if he will take pains to learn of the breaker the manner in which his dog has been handled, with the signs and words of command used, when to use them, how to enforce obedience, the proper time to

punish. By refraining from punishing or otherwise correcting a dog at the proper time, or by punishment at the wrong time, great injury may be done to the quality of his future work.

It is the object of this article to impress upon the beginner the importance of having his dog thoroughly broken and under control, and of knowing how to handle him properly at home and in the field.

Many beginners are apt to think that the only requisites to being a sportsman are ability to kill a bird now and then, and possession of a good dog and gun. The beginner spends lots of time studying the different makes of guns and the effects of different loads and brands of powder, and undoubtedly gains in this way much useful knowledge; but in regard to the dog he is apt to leave too much to be learned, thinking that if he buys one well broken, or has one broken by a competent man, he has done all that is necessary. Let him start on a shooting trip alone or with another beginner, and he will probably realize that before he can thoroughly enjoy a day's sport there is much for him to know

before he can handle even a well-broken dog.

A dog which is not well broken and under good control can spoil the day's sport, though the animal cannot be blamed for doing what he has not been taught not to do.

One might suppose the best time to punish a fault to be when the fault is committed during actual work in the field, and there are times when punishment—and for some dogs severe punishment—is necessary during their work. It is desirable, however, that the dog be allowed to develop his nose, speed, range, and hunting intelligence in as nearly his natural manner as is consistent with steadiness and obedience to necessary commands and directions.

If a dog has been thoroughly yard-broken before being put to field work, wrong actions caused by the excitement of work on birds can be prevented or checked. If in his excitement the dog forgets former lessons for the time and is disobedient to an order given for the

ness, and come to heel or work off in another direction as soon as he was satisfied as to the location of the birds.

A certain amount of flushing is to be expected, and oftentimes the dog cannot be blamed for it. A temporary partial failure of his scenting powers, or certain conditions of ground, wind, or weather, may be responsible for his failure to point. There are occasional cases of lack of the natural disposition to point in dogs that are otherwise good. With a little patience and judgment, such dogs may be taught to point, or at least wait for the handler to come up and flush the birds, and will in time develop the habit of pointing as well as other dogs.

Spaniels are expected to flush their birds, and are usually used for hunting in cover, and taught to hunt close to the sportsman, so that he will be within shooting distance when the birds get up.

Yard-breaking should be begun by teaching the dog to remain quiet in confinement, and, after he has become accus-



"Jennie," First Prize Winner at Initial Trials of the Eastern Field Club.

purpose of checking him in breaking shot, or to prevent him from chasing, he can be punished for disobeying; and if the order is repeated while he is being punished, he will connect his punishment with his disobedience to the order. Otherwise he would be apt to connect the punishment with the act of finding birds and so develop the habit of blinking or bird-shy-

tomed to the collar and chain, by being broken to lead on chain. Consistency and thoroughness are important even in the minor details, and the breaker's temper should be well under control; the dog being made to understand that when he is punished it is because he deserves punishment and not because his master is out of temper.

It is very desirable that he should learn as early as possible that when punishment is deserved it will not be easy for him to escape it; and he should not be allowed to go unpunished at one time for a fault for which he would be punished at another, or be struck at times when he is free to avoid the blow. When it is necessary to whip him, he should be held by the collar during his punishment; and, when it is over, be made to understand that he need not fear the whip until he does wrong again.

The same words of command should be used at all times when the same acts are required, accompanied by motions of the hand when practicable. By this means the dog will learn, as his education advances, to connect the gesture with the command, and to obey it without its being necessary to speak to him. The dog, having learned the meaning of different gestures in the earlier lessons, will by their use be more easily made to understand what is required of him in later lessons.

In order to be able to secure the dog at any time, especially when he expects a whipping, it will be necessary to have him thoroughly broken to come when called; therefore, this is the most important part of his education. Patience and judgment are necessary at all times, but particularly so in this part of his breaking, and more force will probably be necessary than at any time except when teaching him retrieving.

If his disposition will allow of his being broken without much severity, the less used the easier it will be to retain his confidence and keep him cheerful under discipline; at the same time, he must be made to realize that his lessons are serious matters. Playfulness during lessons should be checked and avoided on the part of both the dog and his breaker; yet every opportunity should be taken to encourage him by praise and petting when he has done well.

Force in breaking does not necessarily mean telling the dog to do a thing and whipping him until he does it. Patience and persistence are as effective at times as punishment. The dog should be patiently shown what is required of him, and the amount of punishment given to enforce obedience be governed by the amount and character of the dog's resistance after the breaker is satisfied that the dog understands what is required. The

whip should be used only as a final argument, when a dog's sulky or wilful resistance makes its use necessary.

After each lesson he should be given a good run, with no more restraint put upon his actions than is necessary to keep him out of mischief. During his lessons a long check-cord should be kept upon him to prevent any attempt to bolt.

Among expert breakers the relative merits of the whip and spike collar may be a matter of individual preference; but in the hands of a novice the spike collar is a dangerous instrument, and being kept upon the dog's neck in readiness for use during lessons, keeps him in dread of its use when it is much more desirable to encourage his cheerfulness. By the use of the whip he is more easily made to understand the application of punishment, and that it is not to be feared unless deserved.

If the dog's obstinacy during a lesson has made that lesson necessarily more severe than usual, the dog upon nearing home may make a bolt for the kennel, refusing to come back when called. Upon the first indication of such an intention the cord should be attached to his collar and he be allowed to get well under way before he is sharply checked and made to return. Afterwards he may be permitted or made to enter his kennel, when the breaker, stepping back as far as the length of cord will allow, and out of sight of the dog if possible, should force him to promptly obey his call. At other times the dog should be given opportunities while on the cord to dodge into hiding-places, and taught in the same manner that he must obey his master's call under all circumstances. He should always receive plenty of encouragement and be praised and petted for obedience, whether or not he has had to be forced to obey.

In order to make the dog a satisfactory retriever in the field, it is necessary that he should be broken in such a manner as to make it possible for him to learn to love the work after he has been taught to do it properly. Care should be taken not to force him too hard and try to teach too much at one lesson, thus confusing and discouraging him. For the first few lessons some small, light article should be used, such as a corn-cob or part of a newspaper rolled tightly, and tied to keep it firmly together. This should be small enough to be easily placed in the dog's

mouth, and long enough to be grasped at either end.

The dog should be taught first to hold it in his mouth, then to carry it a few steps, and deliver it while sitting in front of and facing his breaker; next, to take it himself from the hand when held an inch or two from his nose. After this, increase the size of the roll to necessitate his opening his mouth wider to receive it, when he should be made to take it from the

hand when held near the ground; next, to pick it up himself from the ground, and then to go to and pick it up when tossed a few feet distant. He will more easily learn the object of the lessons if he is made to carry and deliver the roll after taking it in his mouth each time; and it should not be pulled away from him, but he should be made to release it himself and not attempt to grasp it again when it is taken from him by his trainer.

The lessons should be made as easy and pleasant for him as possible; at the same time, he should be made to understand that what he is told to do must be done.

They should not last longer than is necessary to teach him each part, however slowly and reluctantly he may accomplish it; but he should be made to perform each part promptly before beginning the next lesson. Unnecessary orders should not be given at any time, and none should be

given which are not expected to be obeyed, or which can not be enforced. These principles in breaking apply especially to a timid and nervous dog, as, whatever his disposition, he should be taught to look upon his breaker as a friend as well as a master; and if this is done, and he is made a companion of as much as possible, his intelligence, confidence, and courage will develop rapidly and satisfactorily.



Backing!

THE DOOM OF MICHIGAN'S GRAYLING.

By Leonidas Hubbard, Jr.

THE grayling is disappearing from one of its few American haunts—certain streams of Michigan, where it is doomed to become extinct through the State Fish Commission's mistake of planting trout in grayling streams.

Michigan was proud of its grayling and proud of the streams that held them.

There were no others nearer than Montana, and no better grayling grounds this side of Norway.

The rivers, running through desolate pine plains and slashings, were far enough removed, throughout the greater part of their length, from the towns and cities to be out of the reach of the before-breakfast and after-supper fishers; and no

man dreamt of a time when grayling would not be plentiful.

Michigan sportsmen had a decidedly good thing. But a mere good thing was not enough. Lying around the camp-fires at night, fishermen told each other what glorious sport they would have if only the streams could be stocked with trout. And why should they not be? Their waters were cold, and swift, and clear; in fact, ideal trout streams. And what sport one could have catching trout and grayling at the same cast!

From talking to one another they came to advising the Fish Commission. The Commission adopted their suggestion, planted the waters of both streams with trout fry, and thereby made the mistake of its official life. Let other fish commissions take warning.

The trout fry grew into trout of edible size. Then they increased at a wonderful rate. Next it was noticed that small grayling were becoming scarce, and when fishermen with an investigating turn found in their dead trout grayling ranging from the tiniest to a length of five inches, the mistake of introducing this grayling's enemy became apparent.

But it was too late. The trout had gotten their start. The grayling found themselves powerless in the war with their heavier, stronger rivals. It was suggested that the State Commission should breed grayling and restock the streams, but the uselessness of this was apparent when one thought how quickly the fry would be devoured.

It is only the large grayling that remain now. A man may fish for days in the Manistee or Au Sable without catching one too small to eat. The big fellows, too, are becoming more and more scarce with each season, and the sportsman knows that a few years hence there will be none left.

My brother and I have fished the Manistee for the last dozen seasons, and have watched the progress of the slaughter. Ten years ago I took fifty-two grayling in half a day, ranging from six to fifteen inches. Not a trout did I see then. Last year all had changed. Trout were more numerous than grayling, and were of all sizes. The grayling were large, scarcely any running as low as eight inches.

But what fishing it was! We caught trout and grayling side by side. We would

take one of each at the same cast. It was great sport, but unnatural sport—sport made possible only by abnormal conditions.

We reached the river by driving twenty miles across pine plains from Kalkaska, and started into the stream at the head of a long riffle where the water, perhaps a little more than a foot deep, tossed away over a stony bottom. We were casting with the ordinary run of trout flies. Trout and grayling eat the same food. You can catch either with the same sort of fly. You can catch them both with the earthworm or with the minnow, if it is small enough.

They were rising well that evening.

"Splash!" and at the first cast I had hooked a trout. It was a half-pounder. I took it off and pushed it into my basket with vindictive force, for I hated to see it in those waters which a few years before had been sacred to its rival.

There was another splash. It had missed. Then another and another, and I had hooked a grayling. It was a beauty, and I could see its silvery sides as it rushed through the water with all the fierceness of the trout. It seemed to me to possess a certain grace in its movements that the trout does not have. And what a fight it gave there in the swift stream! There is no pulling such a fish against the current or lifting it out of the water or trying to hurry the end. All these things you may do with the little speckled prize-fighter, if you want to, and not be certain of losing him. But don't try it on the grayling. His mouth is so tender that one wonders how in the world such delicate flesh and such cyclone fighting powers can be in the same fish. You must handle the grayling with care. You must give him every bit of the spring in your rod and worry him until he cannot make those powerful rushes. Then work him to you. If you are not using a landing net, reach into the water and catch him.

From the tributaries of these streams where grayling used to abound they seem to have been exterminated entirely. It is only in the main stream that one finds them now. In each tributary the phenomenon has been the same. The Manistee has reached the next to the last stage, and it looks at present that half a dozen years will see the last of Michigan's graylings.



IN DAYS GONE BY.

By
Milton
B.
Marks

ABOVE the old bridge the water was sluggish and still, and the creek was wide—not so wide, however, as to escape from the shade of the trees which almost met and caressed each other across it. A trifle farther than a stone's toss above the bridge, the rank vegetation along the banks hid a bend in the creek.

All of the stream that was visible above the bridge was this great, quiet pool, wherein the shadows of the surrounding woods were reflected in inky blackness, flecked with only an occasional bit of sunlight. It was deep there, too. If one's eyes might have been believed, it was deep as the sky is high, for down, down in the center through an opening in the tree-tops one could see fleecy clouds pierced with patches of blue.

The surface of the pool was undisturbed, save when some grasshopper suddenly found its flying leap ended, to its surprise, in the deceptive water. For an instant it would kick and struggle vigorously, and then rest, whilst the widening circles of its own creating reached the farthest bank.

Above the bridge the flow was scarcely perceptible; yet there was hidden power there, and the grasshopper would be slowly borne helplessly across the shadowy

pool. At intervals its frantic efforts were renewed, but, unless some friendly spear of grass was encountered before the current quickened, the unfortunate insect became the lawful prey of the minnows which hovered and sported between the shadow of the bridge and the sunshiny shallows.

Below the bridge a road led through the creek, and here the farmer stopped to water the horses and soak the fellows. To the farmer's lad there was a certain feeling of expectancy and fascination attendant upon this rural custom, for there was always a chance that the river-bed had changed—that the creek had become bottomless since the last trip, and that the sinking hubs might never reappear. Such is the extravagance of fancy. When the farmer's lad chanced to be alone, the horses were allowed a long rest in the cool water. How the faithful beasts enjoyed it! With ears alert they would stamp playfully and nose the water, and now and then drink long draughts of it.

Only two rusty, sagging barbed wires showed where the road fence crossed the stream. The rhythmic sway of the lower wire in the current and the gyrations of a chance lodgment of sticks caused curious eddies in the water. Occasionally a stick would break away to continue its

journey, and, striking a quickened current, would rush on. One could not help wondering how long would be its journey to the big dam, which was no less than a dozen miles if one followed the sinuosities of the creek. Would the bit of wood be noticed by the wild duck which flew quickly away when boys attempted to force their unwelcome presence upon its hidden retreat? Oh, if one could steal into all the secret bayous of the stream as unobserved as the helpless stick, what wonders might be unfolded!

The dried, stringy covering of decayed leaves and grass on the top wire of the fence showed where the spring freshet had been. Some of the posts along the line were entirely rotted off the ground, but they still clung to the wires with the persistence of long habit. One would have said the aged fence had almost outlived its usefulness.

On the farther side of the fence the creek wandered through a short stretch of boggy pasture land, relieved by an occasional clump of bushes or a lonely tree. The opening was but a neck of the big pasture to the left, and toward evening the shadows from the wood beyond would cover it. From the bridge one could follow with the eye the sparkling course of the creek across the open, until it turned and was lost among the trees. Thither the pigmy ship had gone.

If it was fascinating, while dangling one's feet idly over the edge of the bridge, to watch the insect tragedies of the pool, and to speculate on the probable windings of the river above that curtain of verdure, it was vastly more satisfying to explore the course, tramping along a bank where, between the clumps of bushes, wild garlic grew in profusion, scenting the whole air. Of course one should not go barefoot through this tangled wilderness, for wicked nettles vied with the garlic, and the thought of stepping on an occasional snake was not pleasant—it gave one an uncanny feeling. However, the snakes, as a rule, were harmless, and usually glided away as quickly as possible. On the trip of exploration one should have carried a light, stout club, for about the edges of the bayous were many frogs, and a string of frogs' legs was ever the joy of a boy's heart.

At a considerable distance above the old bridge was the wreck of an ancient

sawmill. The great saw was still in place, but it was rusty and had not turned an inch in many years. The posts of the old structure were fast rotting away, and at every step there seemed to be imminent danger of precipitating the entire mass to the bed of the creek below. But to one who risked the danger there was great reward, for the rock bass seemed to haunt the old posts as they haunted no other place less perilous to reach. And what boy worthy of the name would not run some risk for a string of goodly bass.

Opposite the old sawmill a new gristmill had been erected on the bank. It was run by an honest, kindly Scotchman, who did not mind in the least if boys chose to borrow the old scow and explore the millpond and the creek above. With the aid of the long pole and by means of an unrelenting struggle against the inertia of the heavy scow, one might reasonably expect, in time, to swing clear of the dam. Once started, it took but little effort to keep the boat in motion.

All this is as it used to be. Now one would scarcely care to visit the once familiar scene, for they say that the old sawmill was long ago condemned and torn entirely away. Even the trees which shaded the pool above the bridge have been leveled to the ground—from what particular personal motive it does not transpire. The old fence has been replaced with a new one, and the trees which were appropriated in place of posts—so long ago that their growth had covered the wire until it passed nearly through the centers of their trunks—have been reduced to firewood, and new cedar posts placed in their stead.

The old bridge, however, is still there, fuller of shot-holes than ever before, for each boy, as he comes into possession of his first gun, must hold its muzzle close to the boarded side of the bridge and add another hole to the row, which grows longer as the years go by.

If, by any chance, the township become as thrifty as the landowners, and, as a consequence, a new bridge replace the old one, then the last vestige of the old familiar scene will have departed. One would think that the creek itself, after having been so ruthlessly unmasked, would steal away, ashamed of its own nakedness.

THE SPORTSMAN'S VIEW-POINT.

By Caspar Whitney.

Shore Birds Need Protection.

Perhaps no class of game birds has withstood such general and sustained slaughter as the many varieties of snipe, of yellow-legs, plover, and others that come under the general head of shore birds. Not only is scant legal protection given them in the matter of close seasons, but gunners seem to feel that there is no limit to the size of a sportsman's bag. Men who keep within a sportsman's limit when afield for grouse, partridge, or "quail," throw off all restraint when shooting snipe, and cease firing only when either ammunition or the birds are exhausted.

I am willing to believe that there are men who fail of maintaining a sportsman's standard through ignorance or thoughtlessness; but surely by now that class must have dwindled to insignificant numbers. There is small excuse for ethical ignorance among men who shoot, hunt, or fish in these days, when clubs and associations and individuals are, from land's end to land's end, continuously holding aloft to all beholders the sportsmanly standard. There are too many shooters who really have not the instincts of a sportsman; whose sole interest is in filling a game-bag, and whose sportsmanship is a mere veneer, assumed at the club or where else sportsmen congregate. And there are too many of the weakly good that permit this kind of shooter to thrive unmolested. "Game Hog" is a very unhappy expression, and yet it most fittingly applies to a large number of our friends. Such a man should be published, and I propose creating a selected and indexed list of this kind of creature.

Uniformity in Close Seasons.

Sportsmen should bend all energy in lengthening the close season of shore birds, and of woodcock particularly. The season now in many States not only opens too soon for the wise protection of these birds, but, by allowing

gunners afield, the unscrupulous are afforded an opportunity of also killing, weeks before their open season, "quail" and grouse when they are too young to take advantage of their natural protection in flight.

There is no weakness in protective legislation so far-reaching in its direful effects as lack of uniformity in the close seasons of game birds. Effort for betterment is making constantly, but it is entirely lacking the aggression and insistence with which the big game-hunters won recognition in a similar cause. In point of fact, it seems as if the big game-hunters—the class for which the Boone and Crockett Club stands, for example—are the only ones willing and able to really fight for game protection.

By way of emphasizing the need of readjusting the laws in this matter of open and close seasons, New York furnishes ample illustration. The woodcock open season on Long Island is from August 1st to January 1st, except in Richmond County, where it begins July 4th. In New York State, generally speaking, the open season is from September 15th to December 15th, with these variations, however, that in Oneida County it is from August 31st to November 16th; in Ulster County, from September 30th to December 16th, and in five others it is from August 15th to December 16th.

Could there be legislation more absurd, or less calculated to offer satisfactory protection?

The small game men move so slowly and so meekly that if they do not look sharp the birds will be shot off before the needed protection is secured.

Guns without Ammunition.

Of the many inconsequential, not to say trifling, exhibitions of legislative sense that have marked game-protective State law-making, perhaps Pennsylvania just now supplies the most brilliant sample.

Several years ago the State Board of Game Commissioners succeeded in having an excellent law passed for the protection of song, insectivorous, and game birds, but the legislature, with that sapience peculiar to State legislators, did not then provide, and has not subsequently allowed, a single dollar for the occasional expense necessary to enforce the law. And so for three years the members of this Commission have paid out of their private purse the expenses of law-suits incidental to game-law violation!

Recently the President (W. M. Kennedy) of this board of sportsmen and loyal citizens has sent an appeal to Pennsylvania sportsmen for donations to prosecute this work, for which the State should make an appropriation. His address is 410 Smithfield Street, Pittsburgh, and we bespeak liberal support of his efforts; but is the enforcement of the game laws of the great State of Pennsylvania dependent upon private subscription?

Surely there must be some State committee Quay has not subsidized.

**The
Market-Hunter
Checked in
Massachusetts.**

An act was recently passed in Massachusetts, which, although an innovation in protective legislation, is one which, in my opinion, should be followed by every State in the Union.

"For a period of three years after the passage of this act, it shall also be unlawful to buy, sell, offer for sale, or have in possession for sale, any woodcock or ruffed grouse, commonly called partridge, whenever or wherever the said birds may have been taken or killed."

This literally cuts off the market-hunter, and thereby strikes at the very heart of game slaughter, illegal or otherwise. It not only protects the grouse and woodcock of its own State, but provides against the importation of the birds from other States. It is really the only certainly protective plan that has been devised, and originates, I believe, with the sportsmanly editor of *Forest and Stream*, George Bird Grinnell, to whom I offer congratulations, and whose suggestion OUTING heartily indorses.

I beg, however, to remind our sportsmanly neighbors of Boston that Massachusetts still permits spring duck shooting, though we look now for reform also in that direction.

**Half a Loaf
Better Than
No Bread.**

Here in New York we have been obliged to accept Hall's wild-bird protection bill, shorn of several important clauses—notably the one covering gulls—because it was a question of half a loaf or no bread. One legislator with a friend in the gull-killing business on Long Island apparently had strength enough to kill the bill; and the best way to fight this kind of people is to take all you can get, and lie low for another chance to secure more. Therefore, it was wise to accept what could be got, and the bill is an excellent entering wedge.

The open season for deer in New York will hereafter be from September 1st to November 25th; during the remainder of the year venison cannot be legally sold or possessed.

**The Open Door
in
Game Protection.**

Though sportsmanlike sentiment is certainly increasing among hunters of the West, so much cannot be said for that large public which goes abroad for fish. Each season seems to bring added invention to the devising of unlawful lures and an added demand for them. Since the opening of the season, the tradespeople have been advertising extensively and doing a large business in a variety of snares and lures whose manufacture ought to be made penal by law. Fish-spearing minnows, used as decoys with which to attract to slaughter, are going well. There has been considerable demand for that instrument of death known as the "Devon minnow," which carries four separate gangs of hooks. The "guillotine," a villainous machine which flies shut when a fish strikes and stabs him on both sides of the head, has found much favor. "Snap-and-catch-'em" hooks, "lever" hooks, "spring" hooks, are among the devices in sound standing with gentlemen who regard a trout or a bass as an outlaw.

There has been much sale of drag seines, gill nets, hoop nets with or without wings, trammel nets, and so forth. Architecturally ingenious and intricate fish-traps find ready purchasers. Head lanterns, or "jacks," to be used in stabbing fish at night, are offered in a variety of attractive patterns and colors. The use of these things is forbidden by law in most States, but there is no law

against their manufacture and sale, just as there is no law against a man eating game out of season, or indulging in alcoholic drink in a prohibition town or State.

There should be a revision of laws so as to aim at the individual offender. Here is an opportunity for our several game protective associations.

Promising
Ruffed Grouse
and
"Prairie-Chicken"
Outlook.

The ruffed grouse and "prairie-chicken" crops in the West promise excellently. The birds wintered well, and, since mating, have been favored with an exceptional season. It has not been too wet nor too dry, and activity of the game-wardens has prevented serious interference with the breeders. A dry time in the West is always favorable to brooding. The mother bird knows enough to make her home within easy reach of both water and food, and the absence of rain and wet herbage means so many more eggs unspoiled. As all of the Western States now have game laws of some sort, and as they are enforced in a majority of cases with at least a reasonable rigor, it is likely that the grouse and "chicken" products will increase instead of decrease.

The main factor, however, in the protection and preservation of ruffed grouse and "prairie-chicken," next to the enforcement of sane laws, is the increasing cost of pursuing them. As they have become scarcer, the bills to be paid for the sport to be had from them have grown larger. It is not probable they will ever be ultimately extinguished, for the reason that when the expense of getting them exceeds any possible profit to be derived from their sale, they will be left to sportsmen. With an accret- ing sportsman's spirit

and an enlarging disposition on the part of legislators to assist in the preservation of game, these splendid specimens of American fauna are apt to have a better time ahead of them.

Death-
Dealing
"Pump"
Gun.

Yet it is hard for the birds to make head against improvements in firearms. If we could get a national law, however, making expatriation the penalty for using the infernal "pump" gun, we would have a certainty of good shooting for many years to come.

This device of the evil one—in addition to permitting the butcher, who carries it to send six charges into a bevy in three seconds—is cheap. It is becoming common through certain sections of the West and South, mainly on that account. The only hope is it will get so cheap that it will blow off a few fingers, thereby delivering the *argumentum ad hominem*, which is the only sort of argument users of the "pump" are able to understand.

Manufacture of the "pump" gun is not inhibited by law, but use of one debars a person from affiliation with sportsmen.



Photo by Alman & Co.

M. D. Whitman, Champion. Dwight Davis.

Beals Wright.

The American International Lawn Tennis Team and the Challenge Bowl.

Professional Trainers
in
University Athletics.

The transfer of trainer Murphy from Pennsylvania to Yale has caused some not unexpected statements touching the future of track teams at these universities. It is declared by the sapient prophets that Yale forthwith will regain lost prestige, while Pennsylvania will lose the pre-eminence that has been secured in track athletics during the last five years.

The question of initial material at either university seems not to be a matter of import; apparently it is not even worthy of

Some professional trainers are men of excellent character, but a number, neither in morals nor in manners, are qualified to appreciate, or co-operate with, the proper aim of university sport—*i. e.*, the cultivation of high-minded, well-rounded manhood; the development of the *mens sana in corpore sano* condition.

A
Remedy at
Hand.

My present purpose in referring to the changes making among college trainers, and to the comments these have called forth, is to direct the thought of university men to the more significant feature of the general subject.

How shall the prominence of the ordinary professional trainer be lessened and his too often unwholesome influence minimized? I ask the earnest meditation of alumni.

Is it not quite as possible to create, after a term of years, a school of volunteer graduate coaches in track athletics, in rowing, and in baseball as it has been in football? Or, the volunteer coach scheme being considered as not entirely feasible, university graduates should be induced to give a new dignity and character to this work, by taking it up as a profession, after the manner of Mr. Stagg, of

the University of Chicago, and Dr. H. L. Williams, who goes to the University of Minnesota in like capacity.

The problem is well worthy the attention of university faculty and alumni.

No Race
for the
America's
Cup
until 1902.

With the Boer war dragging on, and the problems in China defying solution, it was hardly expected a challenge for the *America's Cup* would this year be forthcoming from Sir Thomas Lipton. His decision to that effect has been published, together with the statement that he proposes racing *Shamrock* throughout the season of 1901, with a view to utilizing the knowledge thus gained in the designs and construction of a new challenger. All of which means, therefore, that there will be no race of the Cup until at least 1902.

But the weightiest words coming from that keen-witted Irishman concerns the recent habit of American yachtsmen



English Hounds.

consideration. Murphy is going to Yale; *ergo*, Yale will win the "Mott Haven" cup!

The fallacy and the pity of it! Not that Yale's opportunities should be improved, or Pennsylvania's lessened (*sic*), but that general student athletic ability and spirit should be so subordinated to the skill of the professional trainer.

This criticism is by no means directed against the trainer *per se*, but against the regrettable prominence given professional training. Undoubtedly a good trainer is necessary in present-day college athletics, with all their careful and elaborate specialization and the high degree of form or technical proficiency made needful to world's record-breaking performances. Sportsmen do not object to the trainer's presence, but deplore his prominence. They wish he could gradually be relegated to a less responsible and less conspicuous position in university athletic life.

of securing English skippers. His remarks are so good I quote them in full.

"There are many points of difference between American and English yachting, and only when one has spent seven weeks at Sandy Hook can he really appreciate them. England's insular position has done much to make the sea home to many of our people, and therefore much more attention is paid to yachting here than in the United States, but individually Americans are the best yachtsmen I know.

"They are thorough in that, as in all else, and it is due to appreciation of this that my sole ambition in life now is to take the *America's* Cup.

"One thing seems strange, in view of American cleverness. That they are sending here for captains for 70-footers does not seem right, and I am unable to explain why, holding the blue ribbon of the sea so long, they are sending to England for Wringe and other captains. What has become of all the New England blood that made Hank Haffs by the score? I should think New York yachtsmen would promote American sailors to the best positions by way of encouragement."

The comment of Sir Thomas is the more pointed, considered beside the repeated victory in home waters this season of yachts skippered and manned by amateurs and American-born sailors over yachts handled by British professionals and imported crews.

Why are not these British skippers and crews liable to the penalties inflicted by our laws on other imported labor?

American vs. English Fox Hounds. I have been very much entertained by the discussion for some little time making in the sporting journals over the respective merits and values of English and American fox hounds. Unbending prejudice appears to take firmer hold of dog fanciers than of any other class of breeders in the world. And this applies with emphasis to the breeders of fox hounds. Partisans are continually rushing into print for the exaltation of their particular breed over every other that ever was raised. Southern, New England, Middle Atlantic and Middle Western breeders of fox hounds—each seems convinced that theirs is the only really good breed in existence.

But however they may differ on home strains, Americans breeders unite enthusiastically in extolling the native fox hound at the expense of the English. For

so many years has this disposition been exhibited that I suppose we are justified in taking it seriously. The trouble with our friends, the American fox hound breeders, as with many other disputatious people, is that they know, thoroughly, only one side of the subject.

Now, in truth, comparison of American and English fox hounds can very rarely be made with justice to either breed—I have personal knowledge of only one case where such comparison has been made fairly—and therefore deductions are from an uncertain basis, and untrustworthy.

American Ignorance In Selection.

The origin of the mistaken basis, from which American breeders have drawn their conclusions, may be traced to American ignorance in purchasing English hounds.

When riding to hounds, in the English fashion, was revived in this country some score of years ago, an effort was made to secure the best strains from English kennels, and thus establish native sport that would be equally as high class as that on the other side.

With this idea in mind, hounds that had raced across great unbroken fields of grassland, carrying a breast-high scent, were brought from the kennels of the celebrated "shire" or grass country packs—Belvoir, Quorn, Pytchley and Cottesmore—and turned upon the cold and poor-scented countries of America. Naturally, they made a showing which compared unfavorably with the native hound.



American Hounds.

The fashionable or "shire" packs of England are racing hounds of great speed and bone, and undoubtedly the best in the world for their country and style of go-

ing; but they are not the best hunting hounds in England. There are many packs in the "provinces" that would kill two foxes to their one where real hunting is demanded.

Many "provincial" packs hunt over country carrying as poor a scent as any in the hunting districts of America, and they must have the fine discriminating hunting sense and the nose necessary to cold trailing. But this is well known to any one who has followed hounds in Great Britain.

Those who have hunted in England



Miss Frances C. Griscom,
Winner of the Women's Golf Championship of 1900.

well know the difference between the "shires" where they hunt to ride, and the "provinces" where they ride to hunt.

Fair Comparison Not Possible.

It is manifestly unfair to compare even the "provincial packs"—the best hunting hounds of England—with American, over the latter's country; it is utterly impossible to compare the "shires" or

racing hounds with either. The work of all three differs.

The only really fair comparison of which I have ever known was made by Mr. Mather, Master of the Radnor Hounds at Philadelphia. Some years ago he brought over a number of couples of the best English hounds, which he bred, and from which in the second generation he secured hounds with nose equal to that of the American, and in speed, stamina and looks superior.

The voice of the English is never under any breeding equal to that of the American hound.

In a word, the English-bred, English hound is not so good as the American in fox-hunting sense, or nose or voice, but superior in speed and strength. The American-bred English hound of the best hunting strain has been shown by Mr. Mather to be equal in nose and superior in every respect save voice, to the American hound, in fox hunting after the English method in this country.

Silver Fox Culture Fallacy. Apropos of fox hounds, how long is the myth to continue that the silver or black fox is a distinct species—is susceptible to cultivation?

The silver is a freak—certainly a handsome and an expensive one—but a freak none the less.

I have seen silver, black, red and cross (a mixture of red and silver) cubs in the same litter.

Long ago trappers discovered that the silver fox just "happens," and cannot be cultivated through mating the freaks.

No Rest for the Vanishing Duck. Ten years ago the man who frequented the long Atlantic Coast or the lakes and inland streams of the South, saw wild fowl in myriads. It seemed

then that the supply was inexhaustible. They are vanishing fast, however, because of no law, or of weak or laxly administered statutes. The proportion of the annual southward migration now is as one to ten of those days. In 1850 any one who predicted the extinction or disappearance of the passenger pigeon would have been hooted. Truly the life of the wild duck, as stated by "Col. Carter," is one of "peril and hardship."

If an Indian does not steal and eat, or sell, the egg which contains its germ, it is

hatched and swims warily through its early months for fear of natural foes. Once able to fly, it goes South with other members of the brood, and from above the Canadian line to beyond the mouth of the Mississippi it is shot at steadily. Once in its winter home it is kept on the dodge, and when it starts northward in the spring it must run the gauntlet through half a dozen States. The remedy for this lies in the enactment and enforcement of a law prohibiting, with heavy penalties, the shooting of wild fowl except from September 1st to January 1st.

The only game bird which is not injuriously affected by pre-Adamite legislation or hoggishness is the woodcock. It continues to go South and return North in the same quantities. It is never plentiful, and with its shyness, secretiveness and love of undergrowth, laughs the pot-hunter to scorn.

A Real, National, Lawn-Tennis Tournament.

The National championship event at Newport this year was truly comforting to those American sportsmen who had been in troubled spirit over the mediocre exhibition of 1899. It was a notable tournament, judged only by the quality of the native entries and their play; but the attendance of the Englishmen, Messrs. A. W. Gore and E. D. Black, created an interest in the series of matches which made it only second in importance to the one of 1897, when Eaves, Mahony and Nisbet, that other English team, were entered.

Not that the visiting Englishmen of 1900 were thought to have any influence on final results—for their measure had previously been taken—but the international element in match play is always entertaining, even though its efforts be inconsequent.

Quite the feature of the tournament, from the sportsman's view-point, however, was its truly National character. Besides players from the East and South, there were the two Hardy brothers from the Pacific Coast; Kreigh Collins, the Middle Western champion; and two others, L. H. Waidner and J. A. Ryerson, who rank but little lower in that section. The veteran entries included ex-champion R. D. Wrenn, W. A. Larned, Malcolm Chace, Deane Miller and Richard Stevens. Of these, Miller defaulted, and Larned and Stevens were the only ones to approach

normal form. Stevens usually plays at his best, and I think it may be said in all fairness of Larned, that he showed at Newport a week of tennis averaging fully as strong as any he ever displayed.

Although not a great deal was expected of Black, yet he failed to attain even that little, for, after having great difficulty in beating C. R. Budlong, he succumbed in straight sets to his fellow-countryman. Gore got about as far along in the tournament as his antiquated style warranted—which means he was put out so soon as he encountered a first-class man—and he proved to be a very bad loser.

Deterioration in English First-Class Lawn Tennis.

That a player of such limited scope and power as Gore is ranked third is indubitable proof that the average skill of the English first-class has fallen. There has been a popular impression in this country that those in the front rank of English play quite out-classed the corresponding grade in America, but there was never convincing evidence to that effect, even before men of Gore's caliber drifted so near the top, and, in the present condition of the English first-class, the advantage is quite in America's favor.

The truth is that really high-class men are as scarce in England as in America, and there appears to be less promise of their development in the former than in the latter country.

England has one truly great player in R. F. Doherty, who stands in a class by himself, and is to be ranked with the famous Pim and the Renshaws. Next to him on this year's ranking, but of considerably inferior skill, is S. H. Smith—a player of the Gore class, with only a strong forehand drive to commend him. Gore, who is ranked third, we know, and then comes Eaves, H. L. Doherty, Mahony, Black and Barrett. Eaves is unquestionably the best player in England next to the champion, R. F. Doherty, but has been in Africa this year.

In America we have at least five men—Whitman, Larned, Davis, Wright and Wrenn (G. L., Jr.)—who can defeat Gore to a certainty. Smith would be likely to fare but little better, for his style of game could hardly live against that of the first four Americans named. The remainder of the English first ten, except Eaves, are quite out of it. Whitman

could surely beat Eaves, but the Englishman might win from Larned, Davis or Wright, though the matches would be very close, for Eaves and R. F. Doherty are the only two on the English ranking list who to-day play modern tennis.

**Another
English
Team
Coming.**

Mr. Dwight Davis, who is the donor of the International Challenge Bowl which, in conjunction with Messrs. Whitman and Wright, he successfully defended against Messrs. Gore, Black and Barrett, this year, sends word from England of a new challenging team for 1901. This will include, it is said, the Doherty brothers, S. H. Smith and G. W. Hillyard, and the latter's wife.

This would make a much stronger team than that which visited us this year—but by no means an invincible one. R. F. Doherty must be granted a victor over all save Whitman—but Larned or Davis or Wright should beat Smith or H. L. Doherty. Hillyard would cut no figure, as he is in Barrett's class—perhaps not so good.

An illustration of the non-progressive spirit which seems to have fallen upon much of English sport, and certainly upon track athletics and lawn tennis, is prompted by the mention of Mrs. Hillyard as accompanying this prospective team. In 1886, Mrs. Hillyard, then unmarried, first won the women's singles; she has captured that honor five times since and is the present champion of All-England.

There would be no point in commenting upon this circumstance did I not add that Mrs. Hillyard's game is by no means remarkable; like that of Smith and Gore, it lacks versatility. She relies largely upon a strong forehand drive, cannot volley, has not a severe service, and is not at all a player of versatility.

**Whitman
a
Genuine
Champion.**

I am not one of those who believe Whitman to be the greatest player America has ever developed, but I am convinced that there has been no exponent of the game more skilful than he, and that his match play of this year places him in a class with the one-time champion, R. D. Wrenn. This means that Wrenn and Whitman occupy a class by themselves. Last year when I made that statement it drew indignant protests from several players of erstwhile tennis prominence.

Every now and again some old-time player, bubbling over with reminiscent activity, comes forth with a statement that the game has not improved, or that the cracks of the days gone by were superior to those of the present. Even so usually conservative an old-timer as Dr. James Dwight has been reported as asserting that the Renshaw of fifteen years before "could have beaten Wrenn (R. D.) at Newport in 1897." Of course the game has improved, and improved tremendously; the game played by the champions of eight or more years ago is

outclassed by that of to-day—but that is too evident to waste space discussing.

Whitman's best play combines all the features of the modern game—versatility, craftiness, strength, speed. His showing against Larned in the match for the title was masterful; for, though Larned averaged up to his best, and, as usual, was extremely brilliant in periods, Whitman never lost command of his game. For the most part, indeed, he had the match well in hand.

Certainly the champion is worthy of his title in this country, and I am decidedly of the opinion that as between him and R. F. Doherty, the English champion,



Subscription Cup Presented to Sir Thomas Lipton by his American Friends.

there is little to choose. Indeed, I must feel that little to be in Whitman's favor, because Doherty is officially reckoned half fifteen better than Smith and Gore, and there was more than that difference between the games shown by Whitman and Gore at Newport.

**Success of
Younger Element
in Women's
Golf Championship.**

which has from the very beginning been one of consistent and careful progression. She made her first serious try for championship honors in '96, and tied Mrs. Shippen for second in the medal play round. Since her form has been improving steadily. She is not a brilliant, but a careful performer, whose short game is particularly excellent. Miss Margaret Curtis and Miss Eunice Terry, who, finished second and third, showed quite the most promise among the other players, and I look for Miss Terry, who, in my judgment, really stands next to the champion, to give Miss Griscom all she can attend to every time they meet. Miss Hoyt has lost none of her skill, but she has been passed by the other three.

Miss Anthony, the Western champion, did not qualify, and Miss Hecker, the Metropolitan champion, was beaten handily by Miss Terry.

The tournament emphasized the rapid improvement the younger women are making at the game, for the play averaged much higher than that of last year.

The driving contest, won by Miss Louise Maxwell, showed 189 yds, as against 164

The success of Miss Frances Griscom in the Women's Golf Championship is a fitting climax to a career

**Sentiment
Strong
Against
Professional
Caddies.**

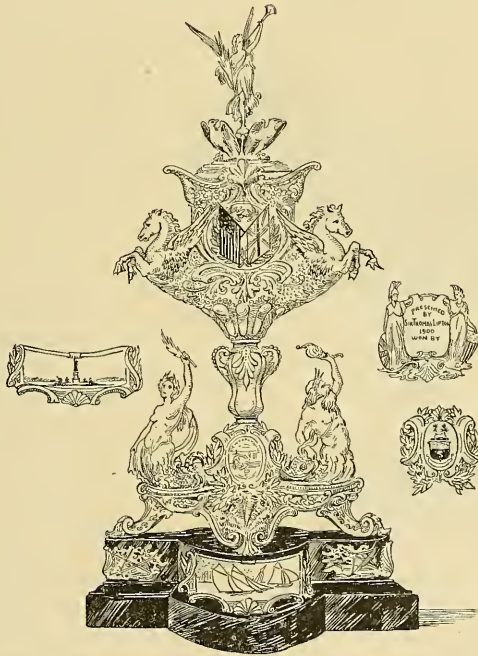
who does so nowadays really offends the sporting sense of his fellows.

Sportsmen will be pleased to learn that the sentiment against employing professional caddies in match play among amateurs has attained such depth, that the golfer

It has come to be considered among the best class as not a sporting thing to do; and this is a perfectly normal and sportsmanly attitude. Several arguments have been published in support of the professional caddie, or, rather, I should say, the same argument has been exploited over several different signatures, but in no case has a point meriting reply been advanced.

The stock argument of traditional usage is made to bear the brunt of the de-

fense—garnished with an occasional original, and often startling, thought of the writer. For example, one who pretends to golf learning sufficient to yield "Half-Hours with the Coaches," asserts that "a good caddie * * * is as much a part of the game as a bag of clubs." A similar statement could be made concerning the football coach; but, of course, only a thinker of such originality as the half-hour logician would conclude therefrom that the coaches are entitled to instruct their pupils on the playing field during match play. There is an explicit



Cup Offered by Sir Thomas Lipton for 70-Footers,
and Won by *Rainbow*.

rule in football, and in every other game except golf, against a participant receiving instruction during a contest.

In another spare half-hour this writer declares that "quite apart from the value of his (the professional caddie's) advice is his acquaintance with the rules." So that, in addition to having his coach at his elbow to instruct him in every play, the weary golfer may also be spared the necessity of learning the playing or ground rules. The caddie selects the proper club, recites the appropriate rule, and instructs the unthinking golfer how to make the stroke. In a word, the caddie supplies the brain work and the golfer the muscular effort. Why bother to have eighteen holes, if this kind of doctrine is to prevail; a captive ball will furnish abundant exercise for the arms without any mental effort or the expense of a caddie.

**Independence
of Playing.
Intelligence
an Essential.**

But it is really absurd to discuss the matter; men of intelligence appreciate that the attractiveness of any game, and the only test of its players, depends upon the amount of judgment and skill required. The player's judgment is fully as important and quite as much constitutes the quality of his game, as his mere skill in the execution of strokes, whether the game be tennis, racquets, polo or golf. There is a class of men who would accomplish all their tasks vicariously if it were permitted them to do the mere parading. No doubt, there are those who would like to do the eighteen holes of golf at the least outlay of mental and physical effort. To these I commend the doctrine of the writer whose half-hour logic I have already explored. Most Americans, however, prefer to do their own thinking, and take no pleasure in a game for which the intelligence is supplied at so much the hour. That explains why throughout the country the sentiment against employing professional caddies has waxed so strong.

The very vitality of the game, of course, depends upon its intellectual development. How long would any game last if prevailing rules encouraged the making of its players into a class of mere puppets? How long will golf last in America if the full independence of the playing intelligence of its players is not insisted upon by the rules? The American, unlike the Englishman, is not content

to travel the cramped way of tradition; he has demonstrated that through every other game taken from the mother country, and there is no good reason to expect he will tolerate an exception in golf.

**United States
vs.
Canada.**

Golfing skill apparently has not advanced very much across the border. It used to be that the annual match between picked American and Canadian teams was one of the important meetings of the year. But the Canadians were so hopelessly outclassed last year that interest in the event has practically ceased to exist, and one glances at the result merely to note by how much the American team has won. This year no effort was made by the National Association, as has hitherto been the case, to pick the strongest team possible; on the contrary, the team sent was a thoroughly good second-class combination, but it was strong enough to win over the beautiful links (15 holes) at Quebec by a score of 19 to 14. The play was much more interesting than in 1899, when the American team, chosen from the first-class, utterly overwhelmed their opponents, and suggests the wisdom, for both sides, of pursuing the plan adopted this year.

The American team included John Reid, Jr., J. G. Averill, G. G. Hubbard, J. H. Brooks, S. G. Stickney, C. S. Farnham, W. Waller, Chester Griswold, Jr., John Moorehead, Jr., and Howard Morris. The Canadian team included A. W. Smith, the Dominion champion, who was beaten 3 down by Mr. Averill.

Other, but unofficial, play of an international character was provided during the rounds for the President's cup at Newport by the attendance of the English golfer, Mr. Crossfield, who, having defeated no less a promising young player than Mr. R. C. Watson, Jr., was beaten by Mr. C. T. Richardson, who in turn lost to Mr. Charles Hitchcock, Jr., in the finals for the cup.

Mr. Hitchcock's victories over ex-champion Mr. Harriman and Mr. Beyers, followed by that over Mr. Richardson, rather emphasizes his position among the younger golfers this season.

Indeed, the place which Mr. Hitchcock has achieved lends more than a probability to the expectation of those who have followed his play that in the next season he will be near the top of the game.

**Sportsmanly
Attitude
of the
Professional
Taylor.**

If the two English professionals, Taylor and Vardon, do not meet in a match before the National Association Open Championship at Chicago, it will not be for lack of effort-making on the part of some newspaper reporters and the American manager of the English ex-champion. There appears to be a concerted effort among these to literally hound Taylor into a match, which is not pleasing in the eyes of sportsmen, since the avowed purpose is the size of purse attainable.

Vardon and his manager profess inability to understand Taylor's attitude. To quote Vardon's manager:

"I can't understand why it is that Taylor, who has come to this country for the purpose of making money, is willing to meet Vardon in a championship where the winner receives only \$200, when I now have offers from clubs amounting to \$9,500 in purses for just such a match."

That is a frank statement, even though it fails of comprehending the sportsmanship that stands back of Taylor's disinclination to rob the Association event, by previous match play, of its interest this year.

Far from being open to criticism, Taylor's attitude is thoroughly praiseworthy; for although Col. G. B. M. Harvey, of the Deal Beach Golf Club, to whom the open champion is under contract, has been the master-mind in the decision, yet Taylor's sympathy with the motive has been apparent and very gratifying, as showing sportsmanship to be within the ken of the professional.

To enter upon a series of matches previous to the National Open Championship, as proposed by Vardon and his manager, would, of course, make that event an anti-climax—would, in other words, rob it of its legitimate feature for 1900.

Colonel Harvey is too good a sportsman to listen to such a proposition; he promptly entered Taylor for the Open Championship, and has since consistently referred Vardon to that event for the settlement of all professional rivalries.

For all of which American sportsmen are truly grateful to Colonel Harvey.

**Sectional Golf
Raising
Average Play.**

Organization on geographical lines is making its way rapidly throughout the country. The plan of sectional tournaments is growing everywhere except about Boston, where, strangely enough, there seems to be a retarding element very busily at work. But it is true that Boston has ever stretched forth a deterring hand against progressive golf legislation. There is a small but virulent coterie in that provincial city that exalts its petty affairs above the general wel-



Photo by L. A. Berte.

Hon. W. C. Whitney's Ballyhoo Bey,
Winner of the Futurity, 1900.

fare of the game. Yet, in the present president of the National Association, Mr. W. B. Thomas, Boston has given us quite the most sportsmanly and able executive in the history of the National body. Mr. Thomas is a consistent advocate of sectional organization—as is every other intelligent student of the game's American needs.

New Jersey has provided a splendid example of the beneficial extent to which this sort of development may be carried. The golfers of that section have organized a State Association—an idea so excellent that it should be adopted generally. With State organizations as feeders for sectional associations, and the latter

lessening the entries and raising the quality in the National championship, American golf in a few years would equal the very highest English standards.

Not a great deal is heard of golf on the Pacific Coast, but there is none the less activity on that account. Sectional organization is scarcely feasible or required where the distances between golfing centers are so great, but each center is very busily developing. In California, courses at San Francisco, Oakland, San Rafael, Pasadena, Burlingame, Los Angeles and San Diego, are sufficiently good to mention. Portland, Ore., and Seattle and Tacoma, Wash., each has a picturesque and

ing, the Vesper crew was really the only first-class entry. The Americans won easily by four lengths in 6m. 7 4-5s., the distance being 1 mile 153 yards, and the slow time accounted for by rough water and a head wind.

Perhaps it was worth while going so far to win a "championship" from second-class crews, but it seems to me there was literally nothing in it but a junketing trip. Certainly, from a sporting sense, the regatta and the results are distinctly insignificant.

This, however, is not to say that the Vesper crew is not a good one; it is, in fact, one of the very best an American club has turned out, and would have had an excellent chance of defeating some of the London or Thames Rowing Club crews.

And now comes the announcement that J. A. Rumohr and E. H. Ten Eyck are matched to row for a "trophy valued at \$250"! Insulting the National Rowing Association.

Rumohr, it will be remembered, is the Canadian oarsman whose amateur status, questioned by his home organization, still remains unsettled. He won the American championship this year as a member of the Harlem Boat Club, because Ten Eyck—holder—though present, declined to compete.

Ten Eyck is the oarsman who, having earned the right to represent America at the Paris Exposition regatta, disregarded his obligations and declined to go because the National Association would not provide transportation for his father and a friend. Ten Eyck flagrantly fouled Rumohr in the Paris singles trials on the Harlem River, and Rumohr was an equal offender against Mehrhoff on the same river in a later regatta.

Both Ten Eyck and Rumohr are the kind of oarsmen who are distinctly harmful to amateur rowing, and they should be thoroughly disciplined. Rumohr's status is not settled; he is at best a questionable amateur, who has no right to wear the badge of amateur championship until definite action has been taken by the National body.

The indifference of the National Rowing Association to this man's antecedents and its quiet toleration of the insult put upon it by Ten Eyck suggests a very weak or very lax Executive Board.



Photo by T. C. Tuaner.

John A. Rumohr, who Won the United States Single Scull Championship, 1900, by Default.

sporting course—that at Tacoma is 6,000 yards.

American Oarsmen Win at Paris. The victory of the Vesper (Philadelphia) eight-oared crew in the Paris Exposition regatta on the Seine created no surprise. It was almost a foregone conclusion before the race day, for the entries included no competitors more formidable than Continental crews which do not rank with the first class of either England or America. There was not an English crew in the regatta—which was more or less to be expected—and, though a Belgium eight made a pretty fair show-

The present attitude of this board of the Association is well calculated to bring American club rowing into disrepute.

As for the match race—it is the result of that old professional trick of remaining out of a scheduled event with an eye to subsequent match races and increased prizes. Ten Eyck has worked it before, notably in '97, when he refused to meet Maguire in the National singles, only to agree to a match shortly afterwards.

This sort of thing is an insult to the Association and to the intelligence of American sportsmen. The remedy is in the power of the Association; let it be applied.

**Dominance
of the
Paddling
over the
Sailing Canoe.**

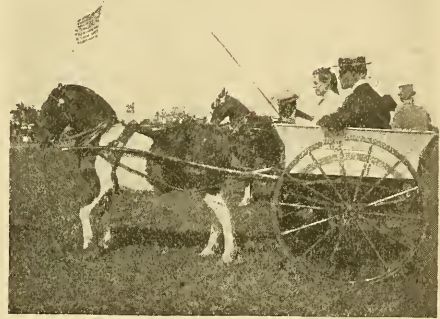
While it is perfectly true that observations made at the annual Meet of the American Canoe Association do not necessarily apply to all sections of this country where the canoe is sailed or paddled, yet it is also true that this Association is representative of the competitive side of the sport, and its lessons must therefore be respected. Canoeing in its broad sense, of course, does not follow the fashions or fancies of the mere comparative handful whose sole idea of the sport is a machine with its skipper perched at the end of a sliding seat. Yet the trend of the general sport is very correctly marked from year to year by these Association meets. The one of this year showed unmistakably the increasing popularity of the paddling over the sailing canoe; and this preference was not confined to the racing machine only, but extended to the cruiser class. Such expression of preference can be viewed only as retrogressive, for the very essence of canoeing is cruising—that kind of cruising which requires a sailing and paddling model.

But we need not take this expression of the Association campers too seriously—for, all told, there were only 175 of them at the recent meet, and that is the merest fractional part of the great number who own, and sail, and paddle canoes. Nevertheless, the sentiment is surprising just the same, and reflects somewhat on the virility of the camper's sportsmanship. Perhaps, after all, it came only from "squaw point."

Still it is to be noted as a fact that the Canadians are undoubtedly united in

their preference for paddling canoes. Toronto has splendid sailing waters, yet the representative canoe club of that town has only one sailing canoe on its register, and literally no sailing men. It never gives any sailing races; all its active members are paddlers, and its race programmes contain only events for that kind of canoe. To my way of thinking that is canoeing emasculated.

But if the Association chooses another camp so difficult of access as that of this year, it will make little difference what



Governess Pony Cart, Winner, Hempstead.

preferences it expresses—few will be there to hear them.

**Fisher
Cup a
Joyless
Victory.**

Although it is the rule, and perfectly fair that a yacht must stand by its breakage, it is always unsatisfactory for both sides when a race is won solely through the disabling of a competitor. Therefore, there is no satisfaction in the victory of *Genesee* over *Minota*, the Canadian challenger for the Fisher Cup. And the race promised to be decidedly interesting; for both were fast, and, unlike last year, the Canadian of this year was a light-weather boat, as is *Genesee*.

The American defender won the first race on superior reaching, although out-sailed to windward; but in the second race, to windward and return, *Minota* beat *Genesee* six minutes and a half to the first mark; and though the latter picked up over two minutes on the run, *Minota's* victory seemed certain when she broke her spreader and was put out of it.

It was really most unsatisfactory, especially since the preponderance of expert opinion favors *Minota* as being the abler and faster all-round boat.

There is neither instruction nor sport in contests ending in this way; yet, of course, it is all in the game and fair. A craft must stand by her accidents; otherwise, in the endeavor to lighten them, yachts would be rigged so flimsily that we should spend more time awaiting repairs than in the actual sailing.

Minota is a good boat; good enough to make another try for the cup—and may better luck attend her sportsmanly skipper, Mr. Jarvis!

Horse Shows for Amateurs.

A kind of show which has come into existence in the East in very recent years is that which was held early in September at Hempstead and at Southampton, Long Island. It is the kind from which the dealer and the traveling professional exhibitor are entirely barred. That at Hempstead was open only to members of the Rockaway Hunt Club; that at Southampton to *bona fide* residents, and the feature of both was the exceedingly creditable showing, not alone in horse-flesh, but in traps and appointments. It all goes to indicate that the quality and form in the average gentleman's stable, nowadays, in this section of the country is tolerably high, and still improving. The influence such shows have, is, as may be judged, decidedly educational. Of all the classes, which ranged from Hempstead cart to break, perhaps the most notable were those for depot wagon, including equipment, and governess pony carts. In five years no class has shown greater improvement than the ponies.

Newport's show this year exploited the dealer element a great deal more than usual, which correspondingly lessened interest in what it had to exhibit. Though there were several brilliant individual entries, the general quality was little, if any, better than that exhibited at the much smaller and less pretentious and strictly amateur show at Southampton.

The club show, restricted to members or residents, is sure to develop among people who really care for horses. Myopia Hunt Club, near Boston, has already given an excellent exhibition, and one is talked of for Orange, N. J.

The open show is spreading widely—so widely one can scarcely keep pace with its numbers; but the dealer must be barred from the amateur classes, if permanent success is to attend the movement.

Campers Beware of Firing the Forest.

This is the time of year when the woodlands are visited by unusual numbers of campers, and when the danger of firing the forests is greatly increased.

It has been an especially dry season, and extra precaution should be taken. Every sportsman who goes into the woods should constitute himself a forestry warden. Be careful; be thoughtful; be sure that the fire of the match, of the pipe ashes, the cigar or cigarette is really extinguished before you toss them to the ground. Never leave a smoldering camp-fire. A terrible forest fire may be started by a match carelessly thrown away. We cannot afford to have our forest lands devastated.

Shameful Turf Scandals.

It is deplorable that in a year which has gathered such a grand lot of horses and produced so many splendid records, there should be such repeated and shameless scandal. It is true that ignorance concerning horseflesh and misplaced confidence in the betting ring, are frequently and solely responsible for bitter criticism. Unquestionably the cry of fraud goes up now and again where no fraud exists. Undoubtedly, too, in and out performances are sometimes to be solely attributed to the disposition or condition of the horse. Granting all this, it still remains a fact that there is frequent fraudulent riding on the tracks, altogether too frequent to permit of our having respect for the Stewards. The Jockey Club would better go out of business or show more concern for the public, which has hitherto had confidence in its spirit and power to keep racing clean.

Mr. W. C. Whitney's offer to turn over to the Club for another race the \$33,830 Futurity purse which his grand colt Ballyhoo Bey won, was a most sportsmanly thing to do. Jealous riding by jockeys in that race created dissatisfaction over the result—but Mr. Whitney's prompt and generous action assures the Messrs. Keene of a race for either Tommy Atkins or Olympian whenever they want it. Meantime, Ballyhoo Bey, who originally

cost Mr. Whitney \$12,000, is recovering from the cut leg he sustained.

What the League of American Wheelmen Has Done. Every little while the daily newspapers give space to some ignorant and querulous correspondent who wants to know "what the L. A. W. has done any way," and "what we get for our membership fee of one dollar." No intelligent member raises such a question, and I give space to it here only because it has appeared so persistently in journals whose editors should have answered it forthwith.

The L. A. W. has, perhaps, accomplished more than any similar organization in the history of American sport; it has (1) secured free transportation of bicycles on railroads; (2) set in motion a good roads crusade that has literally bettered the highways 50 per cent.; (3) been the means of building bicycle paths in the country, and the laying of asphalt strips in the city; (4) secured legislation all over the country recognizing the wheelman's road rights.

The wheelman who does not regard it a privilege to join such an organization for the ridiculous sum of one dollar a year is the sort of member whom the L. A. W. can count itself lucky in not having. The L. A. W. has done great work, and deserves the practical support of every respectable man who owns a bicycle.

When the Devil was Sick the Devil a Saint Would Be. Although I have been a searching and, I hope, fairly intelligent student of college sport for twenty years, I have yet to discover the tremendous legislative bugaboos which faculty members drag forth annually in excuse for not correcting undergraduate athletic habits which all agree (in private) are wrongful. Study of legislative college sport, indeed, is apt I find to give one contempt for the insincerity or the flabbiness (I hardly know which it is) of the average athletic legislator. The virtue that is paraded out of the football season appears to suffer sudden and irremediable defilement with the first signs of the coming football season. Last winter, the period of contrition, there was a virtuous outburst against preliminary football practice, for example; yet Pennsylvania candidates were at work so early as the fifth of Sep-

tember, and Columbia gathered a score of players on the tenth and took them off into the country for training.

Columbia's action is particularly offensive, since it is a repetition of last year and a practice unequivocally condemned by college men. It is bad enough to gather the men on the campus for preliminary work, but to take them off to a resort, bag and baggage, trainers and coaches, is professionalizing the game.

All preliminary training tends to impart an importance to victory that robs the sport of its wholesome benefits, and builds up a professional spirit.

A Change of Heart. If the Holy Cross faculty is sincere in its published intention to cleanse its sport I shall be happy to give it full athletic recognition among amateurs and aid its efforts to the best of my power. Roman Catholic faculties are invariably composed of very clever men, and I have long wondered why they did not recognize the at least material advantage of keeping their sport on an ethical level with that of the other colleges.

In point of fact, the great Roman Catholic institutions of the country—Holy Cross, Georgetown, Notre Dame—have attained, and merited, the unenviable reputation of being least mindful of the amateur status of their athletic teams.

Plaything Racing Yachts. With the 70-footers, and several other classes of the modern racing machines, going repeatedly to the yard for overhauling and repairs, I cannot refrain from comparing them, structurally, with the racing craft of a half-dozen or more years ago—*Volunteer*, *Mayflower*—even *Vigilant*, which was about the first of the extreme racing machine type. Think of the honored *America*, which forty-nine years ago won the cup that bears her name, being still in commission, and stanch! Of course, we have gained immeasurably in speed, but we have lost stability and sea-worthiness, and those are qualities the general racing yacht must possess.

If the extreme racing machine type is confined to the playthings built for very wealthy yachtsmen, we can regard the development with complacency, but that type must not be permitted to become the ruling one. It is the province of yacht clubs to guard against encroachment.

THE GUN.

THE WOODLAND HOLIDAY.

A FEW HINTS TO CAMPERS.

WITH this month comes one of the most delightful seasons for camping, and a few words on that subject will not be out of order. The observance or non-observance of a few simple rules may make or mar the outing and cause you to be welcomed or considered *persona non grata* by the owner of the land you temporarily occupy. To intending campers, I would say:

First obtain permission to make camp from the owner of the land. Don't imagine that because you are somebody when at home, you have a right to pitch your tent where you please and to act generally as if you owned the earth. There are several other people on this planet.

Don't run away with the idea that because you come from "town" you are necessarily smarter than country folk. All the farmers know a lot more about the country than you do, and quite a number of them can give you points about town.

Don't "sass" a man because you happen to be in a boat where he cannot, at the moment, reach you. Country folk see few people and have excellent memories.

Don't imagine that the rustic maiden is green—she can rake in more than hay. Don't make any mistake about the sex of solitary cattle unless you can beat the beast in question to the nearest fence.

Don't take a fool dog with you and have him forever disturbing live-stock or chasing fowls.

Don't make night hideous with senseless howling or alleged music—country people are rational and orderly, and quite a few of them understand and appreciate music.

Don't wear outrageous costumes, especially "fool hats." The people you should desire to impress favorably are not ignorant savages. They will judge you by your actions, and there are few better judges.

THE SELECTION AND CONDUCT OF A CAMP.

USE judgment in selecting the site for the camp. Safety, pure air, sweet water, and a pleasing outlook over a lake or stream are prime requisites. Don't grudge the necessary labor to properly pitch a tent. If you do it well, you will have to do it only once. Don't place the tent where there is a possibility of a falling tree or large limb striking it. Sudden storms sometimes surprise sleepers. Dig a small draining ditch around the tent, and when it is raining don't finger the canvas.

Keep an eye on the guy ropes and slacken or tighten when necessary. Don't disturb others because you happen to feel wakeful. Above all, don't raise false alarms or play fool pranks.

Never start a fire where it can possibly spread beyond control, and never leave a spark when breaking camp. Wet down the fireplace until you are certain that every coal has been drowned out. Two green boughs placed crosswise over the ashes will tell a new-comer that the site is at his disposal.

About the camp everything should be orderly and clean. Keep the tent well aired and open whenever possible. Have a place for everything, and keep everything where it belongs. Scraps dropped here and there attract insects and are otherwise objectionable. Dig a large hole at the most convenient spot, and pile the earth removed neatly beside it. After each meal, drop in all useless fragments and cover with a little earth. This will keep everything sweet and wholesome.

THE CHOICE OF A GUN.

LET it be a twelve-gauge by some well-known maker, and, if the pocket can stand it, of the maker's highest grade, weighing anywhere between seven and eight pounds. Such a gun will admirably serve as an all-round arm. A heavier piece might give better results at such duck as canvasback and at other larger waterfowl, but the trifling advantage so gained would not balance the disadvantage of a big gun for general field shooting.

My favorite gun for all-round work is a hammerless "twelve." It weighs scant seven and one-half pounds, and it originally was right cylinder, left "modified," but I question if any trace of choke remains. This gun has done rare good service at swan, crane, geese—in fact, at about everything feathered worth shooting. It has received the best of care, and is in good condition.

While the "twelve" is large enough, as is proved by the wonderful work of our experts at the traps, it has another good feature which commends it before guns of smaller gauge. Shells for it may be purchased wherever sporting ammunition is sold. The small guns, "fourteens," "sixteens," and "twenties," are light, handy, and sufficiently powerful to kill game, but in an emergency one cannot expect to find shells for them at outlying villages which as a rule are nearest to the shooting. Hence, a box missent by express or other carrier, or lost from a wagon or boat, may mean the loss of sport which a man has traveled far to enjoy. Shells for the "twelve" can be bought

almost anywhere, or borrowed until a fresh supply can arrive, and loss of valuable time avoided.

THE CARE OF A GUN.

WHILE it always is a pleasure to a sportsman to see a fine gun kept as it should be, it is quite possible for an enthusiast to carry the cleaning process too far. There is no sense in everlastingly rubbing at the outside of locks and barrels—the chief care should be the inside. So long as the locks work right and the interior of the barrels present a polished, flawless surface, the gun may be depended upon to properly acquit itself whenever it is charged and held aright.

The inexperienced man will do well to leave the locks severely alone, as in tinkering with them he is liable to do more harm than good. If they do not work properly, take them to a skilled gunsmith and have him remedy the trouble. He knows more about such things in a minute than most amateurs learn during their shooting careers.

A mixture of elbow grease and oil—a whole lot of the elbow to a few drops of oil—is the best thing for the interior of gun barrels. When a white rag leaves the barrels clean after a vigorous pumping, the barrels should be all right. Should a persistent dark spot show and defy an honest rubbing, the safest course for the novice is to visit the gunsmith. He will remove the spot and give useful hints as to future care.

Far too many greenhorns injure fine barrels by the reckless use of hard scratch-brushes, coarse emery, or other harsh powder. A brush of soft brass wire is a useful tool, but hard wire should be cautiously handled.

Should the barrels show dark and dull near the muzzle, lead is probably the cause. This again is a matter for the experienced. For ordinary cleaning, the barrels may stand muzzle down for a few moments in a pail of water, and then be cleaned with the rod and damp rag. After a thorough drying inside and out, use the oiler for the inside and an oiled rag for outside rubbing. The object of standing the barrels muzzle down in the pail is to soften the dry matter sure to be caked near the muzzle.

IN case of a gun not very dirty, a hard wad, or a tight-fitting rag, forced through the dry barrels and followed by an oiled swab and plenty of rubbing, will temporarily serve, but a thorough cleaning is the safest and surest method. A glance through the polished tubes will tell when they are in proper condition.

When putting a gun away for any length of time the oiled rags may be used to plug the breech and muzzle. These keep out dust and lint and are otherwise useful.

Don't leave a gun in its case for weeks at a stretch without careful examination. Don't handle a clean gun and put it away without passing the oiled rag over the barrels and whatever metal parts the hands may have touched. We all love to display a choice arm, but we should remember that one touch of human nature makes a rusty film, especially during warm weather. One of the oiled rags spread over the palm is a good thing for the barrels to rest in while the gun is being exhibited, or when a fellow wants to "feel how she comes up."

PRACTICE IN A ROOM.

SOMETIMES a little wrinkle is worth knowing, and here is one so simple that most novices may laugh at it, yet it has, I am convinced, proved useful upon more than one occasion. When a man has once learned to be a fair shot, he will seldom, under the usual conditions, entirely lose his skill. His arms and hands may, from lack of practice, lose some of the smooth, swift action so essential to deadly accuracy, but he will not entirely forget the hang of the thing. He will still know how to shoot, and, probably, when he misses will know why.

Upon more than one occasion I have practiced without firing a shot, and this for matches at the traps. Of course, regular practice would have been better, but existing conditions rendered such work impossible. I simply put on the clothes I intended to shoot in, put the gun together, pinned a small card to the door and practiced at getting the gun up quickly and swinging it truly upon the card and pressing the trigger at the proper instant. The swinging was varied from side to side and with occasional quick sighting straight at the card.

By this practice one can get the proper feel of things, find out if the clothes bind anywhere and get the old gun to coming up right. When a man puts a gun away in, say, December, and does not again touch it in the sense of handling it as he would in the field for seven or eight months, it is not surprising if his hands and arms forget something of their cunning. The practice in the room will prevent this.

REGULAR PRACTICE.

IF one desires to keep in good form he should practice at regular intervals during the close season. It is an excellent idea to join some active gun club and participate in regular

weekly shoots at inanimate targets. This, while inferior to live bird shooting, is far superior to no practice at all, especially for the man who follows upland shooting. The snappy, rapid action is just the thing for snipe, and also for general cover shooting at cock, quail and grouse. It is quite true that it may not help, if it does not injure, one's work at duck, but it is bound to keep muscles and eyes in trim to act together, and this commends it. Let the man who faces the traps for practice—not plunder—keep his gun below his elbow until he has given the word "pull," and he will find the trap work will keep him handy with his gun and in shape for field shooting.

We of the old brigade used to vary the monotony with doubles and novelty matches. The doubles were ordinary, but the novelties were decidedly interesting. One was to give the word and start to walk a four-yard path. The trap was pulled while the shooter was in the act of walking and whenever the puller chose. Another way was to stand with the back to the traps, give the word and whirl and shoot. Another was to lie down on the back with the feet toward the trap, give the word and rise to a sitting posture and shoot. This is first-rate practice for canvasbacks and geese. Yet another was to place the gun upon a table, stand three yards from it, give the word and get to the gun the best way one could. Shooting from the hip, or from any point below the shoulder was practiced at about ten yards rise. This is a very handy trick when one is working in dense cover. One or other of these, or other styles which may suggest themselves, will not only amuse a party of friends but will help to keep them in good trim for more serious work afield.

Sportsmen have always maintained that in the manufacture of sporting rifles America leads the world. It nevertheless gives us great pleasure to announce that this opinion has been confirmed by the awarding to the Savage Arms Company, at the Paris Exposition, of the Grand Gold Medal for the mechanism and the practical advantages of their rifles.

WHERE WOODCOCK ARE FOUND.

JUST at this season it is frequently an extremely difficult task to locate the woodcock, although many may be known to haunt certain districts.

In the summer the bush cover of the moist beds of nearly-dried-up creeks forms ideal ground for cock, and at that time the birds may be flushed directly off their feeding-places. But in the autumn the cock suddenly desert

such ground during the day-time, although fresh sign may prove they return to it at night to feed.

If in a rolling country, the sportsman will do well to thoroughly beat every bushy hillside and thicket—no matter how dry—within a mile of the creek bottom. Dry woodlands, too, especially those in which cattle have been running, and which are usually styled "bush-pastures," should be carefully searched.

If there be fields of tall corn in the vicinity, see to it that you beat out every yard of them, for an acre of tall corn may be the day-resort of a surprising number of cock.

It may be safely taken as a rough rule that October birds will not fly more than a mile to feed; hence, if they are not found in the muddy creek bottoms, where the "sign" says they fed the previous night, it is safe betting that they are not more than a mile away. A glance over the surrounding country should enable one to decide upon the probable day-shelter of the birds, and a careful beat with a good dog will surely find them in dry woods, thickets, or corn.

COCK shooting in tall corn is as easy to the expert as it is puzzling to the novice. You will, of course, work with the rows—not across them—and, if you are wise, you will shoot at every glimpse of a bird, and very frequently after an instant's sight of him, when you can only guess where he is. Sharp work, say ye, my masters? Yes, in a measure, but not so wonderful, after all. You certainly must be ever ready and swift and smooth in action, but actual sight of the bird at the instant of pulling trigger is not necessary.

Green corn won't stop even fine shot, and your charge will give a pattern as big as a bushel basket. Hence the shaking of a leaf, the flick of a vanishing wing, are enough for the master of the art. In an instant his gun is on the spot where a species of lightning calculation tells him the bird should be, and the trigger is pressed without the slightest delay. The difficulty with the novice is to get him to shoot at once, instead of waiting in vain for a clear view. Experts kill bird after bird in this way. The novice must dismiss all thoughts of empty shells—no good sportsman worries over misses, though he will learn from failures how to hold next time. There is no royal road to success in the field; nothing but experience really counts. So let the novice crack away, although he may only get one bird in ten. We all know what he'll get if he doesn't shoot at all.

E. W. SANDYS.

A GUN ROOM CAUSERIE.

DO not sell your old guns when worn with use or no longer in fashion. It has not hitherto been the rule to preserve them, and already many kinds, which were not new enough to be shot with or antiquated enough to be treasured as curiosities, have become rare. Quite recently an English flint-lock gun realized \$390. Ten years ago this price would have been impossible, but it is recognized that sporting guns will some day be as dear as old armor, and some varieties quite as scarce.

I have seen most of the public and private collections of arms in Europe and know of none that is nearly complete in specimens of nineteenth-century work, and in all double-barreled guns are scarce. Therefore, I counsel sportsmen to keep their old weapons, if good. The sum they will realize now, when only just out of date, is trifling to that they will be worth when, a generation hence, they will be sought by collectors.

Sportsmen who can afford to indulge another hobby might make worse investments than collecting old guns at present prices, and guns take up very little room, do not deteriorate, and are ornamental in their place.

Old armor and military weapons when not in use were carefully tended and kept, but since the day of Manton guns have changed so rapidly and completely that the older sorts have not been kept. A generation ago a fashionable sportsman ordered a new pair of guns each season, his old guns he passed on to his keeper, he in turn to his assistant, as he got newer ones; from the underkeepers they drifted into the hands of the game-watchers, then to the tenant farmers to kill vermin. So, from want of care quite as much as from much use, the good old guns decayed into waste iron, or were confiscated as poachers' property and destroyed. I do not say that all old guns are likely to grow into money, but some makes and types are sure to become valuable; which types I may venture to indicate later; speaking generally, no gun that its owner knows to be good should be parted with lightly.

THE craze in England for big bags, and the reluctance of sportsmen to devote sufficient time to the proper enjoyment of sport, has led to the abuse of driving, a practice not only legitimate in many cases, but imperative on some lands with the present conditions of farming and game-rearing. I grant that driven birds are harder to hit than those put up, and I do not deny that fine marksmanship is a good thing to witness. I do not even question the enjoyment it affords to the shooter, but I do object to marksmanship being considered the end and all

of the sport of shooting with the shot-gun. To stand behind a screen, and endeavor to drop all the birds which come within range of one's gun seems more like defending the last ditch against an enemy, or an ineffectual attempt to combat an advancing swarm of locusts, than the best way of deriving the utmost pleasure from the rightful use of the sporting gun. It is the natural result of exalting the ability to kill above sporting craft.

The pleasure derived from hunting is due to the quickening of natural impulses, by anticipation of the catch; the chase retarding the climax intensifies the anticipation and increases the force of the impulse until the culminating point—the kill—is reached, and it is satisfied. But if we mistake the culminating point for the impulse, or we unduly hasten the growth of impulse, we get, instead of an invigorating, healthful excitation of physiological functions, only a wasteful, sensorial excitement that is weakened by too rapid repetition and is injurious. So, beware of cultivating the pleasure of marksmanship with the shot-gun. Unless guarded against, it is easy to be gratified with marksmanship, instead of the chase, and then one must need repeat, and seek to make big bags, even records, or lapse into trap-shooting.

OF all qualities a modern shot-gun should possess, none is so advantageous to first-class marksmanship as correct balance, which alone allows of the speediest manipulation of the gun. But, if the advantage derived from ability to aim quickly is not to be lost, it is essential that the gun be fast. A fast gun is one in which the firing mechanism acts in the least possible time. With a fast gun, the striker hits the cap of the cartridge within one two-hundredth of a second from the instant the trigger is pulled. A slow gun will require more than that; either a small fraction of a second longer, or such dilatory ignition as the old flint-lock guns gave. In the old days, when the merits of percussion-cap guns were contrasted with the defects of the flint-lock, much more was made of speed in ignition than at present. In fact, experts and critics regard the time required for the functioning of the gun's firing mechanism as a constant quantity, and for demonstrative purposes only search for and recognize trifling variations in the speed of caps and of nitro-explosives treated with different deterrents to retard combustion and ignition. Gun-makers do not sufficiently appreciate the relative speeds of their guns; they have overlooked the point. The sportsman has not.

WIRT GERRARE.

YACHTING.

THE RACE-ABOUTS OF 1900.

THE popularity attained by this class of boats around New York and Marblehead during the last three years, and the continuing interest evinced by Corinthian yachtsmen suggests that a class of small racing boats has been finally developed of some permanent value. Unlike the half and the one raters, the race-about's growth has been slower and steadier, with careful restrictions placed upon their design and construction, so that the old boats might not be too quickly out-built.

When these restrictions were drawn up, it was with the idea of developing a healthy type of boat, giving to the designers and builders all the scope possible, but barring what in racing parlance are called "freaks" and extremely light construction, limiting the sail area to 600 square feet, the water-line to 21 feet, and requiring a displacement of at least 5,900 pounds.

The boats are really racing knock-about, designed to carry an increased sail area on the same water-line, without decreasing their stability.

Last year Marblehead was their racing center, while on Long Island Sound were only a few of this class. This year, however, New York's waters had four new boats and two of last year's Boston boats; so that the class filled well in all open regattas, and interest in the racing was considerable. This is not to be wondered at by those who have seen the exciting finishes, one of the prettiest of which occurred at Larchmont, on July 4th, when with rails under, the

first four boats crossed the line within twenty-one seconds.

It has been a rare thing, too, to see one of these little racers more than fifteen seconds behind the starting gun, and in many instances all have crossed within seven or eight seconds—but then, these boats are sailed by some of the cleverest amateurs in the country.

A comparison of the times, made over the same courses, by the race-about and the Seawanhaka knock-about, shows the new boats to be about one minute a mile the faster in a breeze, while in some cases in very light weather the knock-about has held their own.

THE Yacht Racing Association of Long Island Sound, recognizing the increasing interest in the race-about class in their waters, made the rules and restrictions governing the class practically uniform with those of the Knock-about Association of Massachusetts, offered a championship pennant to the boat winning the greatest number of points in open regattas, and in other ways used their influence to stimulate class interest. Eight boats battled for the trophies of the Sound and the same number at Marblehead.

OF the Long Island Sound boats, the four new ones were from the boards of different designers, namely: *Raider*, designed by Clinton H. Crane, owned by H. M. Crane; *Snapper*, designed by J. R. Purdon, owned by H. L. Maxwell; *Scamp*, from B. B. Crowninshield's designs, owned by Johnston de Forest, and *Sis*, from the Herreshoff works, owned by F. T. Bedford.

This quartet was augmented by the last-year boats from Boston—*Persimmon* and *Colleen*—owned respectively by H. de V. Warner and L. R. Alberger, and the old Sound boats, *Kitty* and *Spindrift*, belonging, respectively, to Hazen Morse and the Pirie brothers.

At this writing, August 27th, although some twenty-odd races have been sailed on the Sound, there is not a great deal of choice among the leading four, *Scamp*, *Persimmon*, *Colleen* and *Sis*.

One point, however, has been clearly brought out, namely, that *Sis* is the fastest boat in heavy weather, if perhaps not on all points of sailing, certainly on broad reaching. No boat in the fleet can hold *Sis*. When with the wind on her quarter, well heeled over, she is so much faster than on the triangular courses always sailed, she has been able to win out every time in a reefing breeze or with decks awash. On the other hand, in light weather she invariably is one of the last to finish, and as there have been



Raider—Owned by H. M. Crane.

so few races in heavy weather, her average is not so high as one would expect.

Unlike the rest of her class, *Sis* is a center-board, with wide beam and shallow draft, and without the usual short bowsprit, giving her more the appearance of a knock-about than a race-about.

Next, in a breeze, comes Crane's *Raider*. She did not seem to get into condition as soon as the other boats, and on several occasions has been badly handicapped by sailing short-handed in her crew.

She showed, however, what she could do, in the fourth race of Larchmont Race Week, when the wind held strong and true to the finish. She was then second only to *Sis*. At the end of the week she had enough points to her credit to win the series prize.

In average weather, Johnston de Forest's *Scamp* seems to be entitled to first honors, having won 10 firsts, 3 seconds and 2 thirds in 23 starts. All of her wins have been made in moderate breezes, and in heavy weather she has been beaten only by *Sis*, and once by *Raider*. She has been unfortunate in being twice disabled, but should retain the lead which she now has.

Persimmon and *Colleen* are very evenly matched for second honors, the former being better, perhaps, in light weather, while the latter is at her best in a breeze. *Persimmon* has started 14 times, and won 5 firsts, 2 seconds and 2 thirds. *Colleen* has won 4 firsts, 5 seconds and 2 thirds in 16 starts.

It is remarkable that both these last-year Purdon boats have repeatedly beaten *Snapper*, one of his latest designs. This may be due to her not having been in first-class condition, but it also shows that the new boats are not always faster than the old, and thereby the value of a restricted class for those who do not wish to build every year.

Spindrift has clearly been outclassed, but at times has shown considerable speed in running and reaching, especially in light weather, and on these points has sometimes beaten the others, only to be passed by them, however, when sheets were flattened for the beat home.

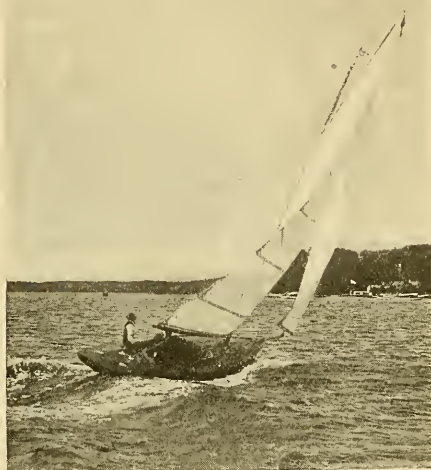
AFTER the first few races of the year, Mr. Morse withdrew *Kitty*, finding her out-built, and sold her.

The new boats at Marblehead this year were *Jolly Roger*, *Banderlog*, *Runaway Girl* and *Scape Goat*, and the old ones—*Sintram*, *Pirate*, *Tunipoo* and *Jilt*.

The *Sintram* holds the record of first prizes, with *Jolly Roger* a close second, having beaten *Sintram* nine times out of seventeen. Of the

other boats, *Runaway Girl* has won once and *Pirate* once, but as *Banderlog* has generally beaten both *Pirate* and *Runaway Girl*, she should be rated next to them, and after her comes *Pirate*. Here again, the advantage of a restricted class is clearly shown by *Sintram*, a boat launched in 1898, standing so well in 1900.

Some criticism has been made of the rules, in that they do not require a cabin, which fact, in



Scamp—Owned by Johnston de Forest.

the absence of water-tight compartments it is urged, renders the boats unsafe in heavy weather. They cannot, however, be called cruising boats, inasmuch as they have but two berths, and only about four feet head room in the cabin. It would have been better, no doubt, to have required water-tight compartments, but to force a cabin on a 21-foot water-line boat would turn an otherwise most comfortable pleasure boat into an uncomfortable cruiser.

The outlook for racing in this class next year is particularly bright. Several new recruits are talked of on the Sound, and in all probability most of the old boats will sail.

ALLEN E. WHITMAN.

IN NEW ENGLAND WATERS.

ALTHOUGH not so brilliant, nor participated in by as many boats as in some seasons past, the racing season just closed in New England waters has been productive of fully as much sport as was promised at its opening, and has afforded excellent racing in at least three of the classes, to say nothing of the valuable comparisons of boats and types made possible.

The racing of the H. O. and the Class D boats, and of the race-about, has been of the best, with corresponding advantage to the owners of yachts and to the clubs giving the races.

Championships in such hard-fought classes as these mean more than the simple winning of races. They stand for deep thought as to how an improvement for a few seconds speed could be made; for constant vigilance to see that spars, rigging, and gear were in perfect condition, and for that coolness and good judgment which must be a large part of the stock in trade of any winning skipper, amateur or professional. They represent, also, the best that the yacht designers and the builders can produce.

UNDER such circumstances the handsome win of the 25-footer, *Flirt*, in Class D, Y. R. A., over both new and old boats, can be considered a distinct triumph for designer B. B. Crowninshield, as well as for her owners, Messrs. Fabryan and McKee—for the designer has had many suggestions to offer in getting the boat into her best form.

Designed under close restrictions as to sail, ballast, and cabin dimensions, *Flirt* was, nevertheless, sufficiently close to the enlarged race-about type as to have all its advantages and most of its speed. In comparison with her centerboard competitors in her class she has shown such a marked superiority in windward work as to more than make up for deficiencies before the wind or in reaching. She turns to windward like a witch in any sort of weather, but on other lays her limited sail plan counts against her. Yet it is the boat that can claw out to windward ahead of her competitors that the average yachtsman likes best, and such a boat is *Flirt* in her class.

Had the H. O. boats, which were built for this class, come within the water-line length and cabin restrictions of Class D, there might have been another story to tell about *Flirt*, for when the boats met in the special class made for the H. O. and 25-footers sailing together, the H. O. boats came out ahead except in a very light air.

C. H. W. Foster's experiment in the race-about class with a fin-keel, *Scapegoat*, has not been a success, and it is doubtful if an out-and-out fin can be made as fast as the semi-fin type which the restrictions of the class have developed. *Jolly Roger* fully earned first honors in this class.

THE Yacht Racing Association of Massachusetts has several perplexing problems to solve, one of which is how to deal with the restricted classes. Yachtsmen opposed to the Association

go so far as to say that the solution of the problems is beyond the Association's power, but I cannot believe this talk, which is based mainly on the trouble with the H. O. boats.

There is nothing in the Association's rules that prevents the clubs from giving what races they please, so long as Association classes are provided and Association rules respected. And to my mind this point about the sailing rules is the main one. The Association's greater strength lies in its having succeeded in enforcing its rules.

Let the Association leave the matter of restricted classes to organizations of owners recognized by the Association. Let it confine itself to its legitimate function of securing uniform racing rules and measurements and it will command the support it deserves.

W. E. ROBINSON.

VIRGINIA'S MUTINEERS.

MR. W. K. VANDERBILT, JR., has had some unpleasant experiences with his racing cutter, *Virginia*. Repairs and alterations have added excessively to the large initial cost of the craft, but these are as nothing, from Mr. Vanderbilt's point of view, when compared with the annoyance he suffered at the hands of mutinous members of his crew. The owner of *Virginia* is an ambitious young yachtsman who aspires to a front rank in the sport. He has sailed *Virginia* in all her races and has acquitted himself creditably. Of course he has much to learn of the sea-jockey's art, and cannot be expected to compete successfully with skilled professionals who have been in the business from boyhood. On general principles he has a right to run his boat to suit himself. He paid for her and is her sole owner. Some of his crew thought otherwise. There were a number of upstart sea-lawyers in his ship's company who presumed to dictate to the owner. They told him frankly that he knew nothing about sailing a yacht, that he was a greenhorn and a lubber, and that by taking charge of the boat he was robbing his crew of prize money which would be theirs if the professional skipper were allowed to handle the vessel in her races.

Mr. Vanderbilt seems to have stood this mutinous behavior for some time. He was, in point of fact, to some extent at the mercy of his crew, the season being late and racing sailors scarce. But the conduct of the malcontents grew to be flagrantly bad, and in the end Mr. Vanderbilt discharged nine of his men who had been particularly insubordinate and insolent. Then came an attempt to boycott

Virginia and her owner. Yachtsmen in the past have endured much annoyance from seamen, but I cannot recall so disgraceful an instance as that of those *Virginia* mutineers. If they had attempted such a course aboard an American deep-water ship, the belaying pin and the "knuckle-duster" would soon have knocked the nonsense out of them. In the navy they would have been given time to repent in the seclusion of the "brig" before they received their ultimate penalty. Of this they were well aware; but they thought they could conduct themselves as they pleased aboard an American yacht.

THE sailor aboard an American yacht gets good wages and good grub. Of course, if the vessel is a racer the work is hard. As an incentive to extra smartness, racing money is given by the owner if the race is won—\$25 to the skipper, \$10 to mates and \$5 each to sailors. This is a comparatively recent innovation on this side of the Atlantic. The usual pay of a sailor is \$30 a month and an outfit, the average cost of which is \$35. He gets as much wholesome food as he can eat, and if it isn't cooked to perfection you can hear his growls a mile off.

If the strictest discipline is not maintained on a racer, the chance of cup winning is slim. One sea-lawyer will spoil a whole ship's company, just as one rotten sheep will infect a flock. The proper course for an owner is to hold the sailing master strictly accountable for the discipline of the yacht. If he is worth his salt he will see that every man toes the mark. If he is incapable of maintaining discipline he is not fit to be skipper and should go farming.

ONE result of the unpleasantness on *Virginia* has been a movement toward the organization of a bureau controlled by yacht owners, which shall supply seamen to our pleasure craft—a bureau conducted on strictly business principles, which shall carefully investigate the references of all men applying for berths, which shall keep a "black-list" of undesirable skippers, mates, engineers, stewards, cooks and men before the mast. Such a bureau would be of great service to yacht owners. Yacht sailors who are deserving would also welcome such an institution, knowing that if they do their duty they are sure of a berth.

The present system of shipping sailors is lax. A yacht owner can never be sure what kind of a crew he has engaged. Their references he rarely has time to look up, and he is dependent in a great measure on persons who have a "pull" with his sailing master. When it is taken into consideration that the happiness and

comfort of the owner and his guests almost wholly rests on the degree of discipline among the crew, the importance of the question cannot be doubted. Yacht sailors have been growing more domineering and exacting than ever during the past five years. It is time they were brought up with a round turn. The mutiny on *Virginia* has called renewed attention to the problem, and practical methods of reform are already in shape, and not a whit too soon.

THE 70-FOOTERS.

THE rivalry of the four 70-footers has been intense, sometimes reaching the height of recklessness and involving serious breaches of the rule of the road. The collision between *Yankee* and *Mineola* off Newport is a case in point where pig-headedness prevailed. This may be interesting to the spectators, but sportsmen look upon the exhibition not without regret. The winter may cool the ardor of the owners of the four, and if the boats can be strengthened sufficiently to stand the stress and strain of a second season, more dignity and forbearance and less slap-dash may characterize the contests.

Devotees of the purely racing machine may be interested in the circumstance that it is not only the 70-footers that have shown symptoms of collapse after an ephemeral existence of a few short weeks. Mr. Cord Meyer's *Altair* and Mr. Lothrop Ames' *Shark*, both new 51-footers, have had to be braced and strengthened with "soul-and-body lashings." They also needed lots of caulking, as they leaked like sieves, or like the challengers for the Seawan-haka cup, which were ruined by a week's moderate racing in 1897 and '98.

The sooner that structural flimsiness and spider's-web rigs are abolished the better it will be for the sport. Yachtsmen, no matter how wealthy they may be, want some honest return for their money. Designers and builders will do well to bear this in mind.

The season of 70-footer racing was appropriately closed on September 13 by a special race held under the auspices of the New York Yacht Club for a cup offered by Sir Thomas Lipton.

Mineola in the N. Y. Y. C. cruise made the best record and won the Astor Cup, but subsequently, in a series of races, *Yankee* carried off the Newport Cup. Therefore the race on the 13th was especially interesting, but, through the winning of *Rainbow*, left the question of class supremacy as much in doubt as before. The course was the familiar outside one off Sandy Hook—where Sir Thomas Lipton made so gallant a fight for the *America's* Cup last year.

A. J. KENEALY.

THE UNIVERSITY FOOTBALL OUTLOOK.

AMONG the eastern universities the outlook for Yale seems, at first glance, to be brightest, that of Pennsylvania next, and then Harvard, with Princeton having decidedly the hardest work on hand.

Princeton loses certainly nine, and possibly thirteen, of the men who took part in that notable game against Yale. The nine men are: Edwards, guard; Hillebrand, tackle; Booth, center; Poe, end; Burke, quarter; Wheeler, full-back; Lloyd, first substitute tackle; Barnard, first substitute center, and George Lathrope, substitute half-back. The doubtful men are: Reiter, half-back; Palmer, end; Craig, guard, and Hutchinson, quarter-back. Reiter, Palmer and Craig are still eligible, but may not be able to play. Hutchinson may not finish his course.

Of the great rush line of 1899—judged by the Yale game, the best of the season—only one regular man remains—Pell—a junior with a year's Varsity experience and the burden of the captaincy. The new line will be mainly composed of under classmen, as only Mills, tackle or guard; Dana and Losey, both center men, and Roper and Gresham Poe, ends, are likely substitutes left over. McCord, the half-back, may be turned into a tackle if the need is not easily met. He had some experience last year. The new class, however, is said to contain considerable heavy material from Andover, Lawrenceville and other schools.

Back of the line, there may be trouble at quarter-back, although Duncan, of the '98 team, and Charlie Young, formerly of Cornell, are available. The latter, however, is better at full-back. McCord, McClave, Levick, Robinson, Hodgman and Mattis remain as a nucleus from which to make up the three backs. Hodgman is the longest punter and a terrific line breaker. McClave and Levick, especially the former, are also excellent ground-gainers and very hard to bring down. Another handicap for Princeton will be, in all likelihood, the insufficiency of the schedule to work out the team. There are too many easy games. It is unfortunate, from Princeton's standpoint, that games were not arranged with West Point and the Indians, but the placing of the Cornell game a week later is decidedly better for Princeton.

YALE loses only one tackle, Francis, and her two ends, Snitjer and Hubbell. Otherwise her line is intact, for Hale, her lively, light-weight center, returns for post-graduate work. She also loses Schweppe and Winter, substitute ends; Allen, sub-tackle, and Cunha, sub-center; but these losses are not particularly serious.

Irwin, a good man from Hotchkiss, is said to be able to keep Olcott thoughtful and busy. Yale's most serious vacancy will be that caused by McBride's graduation. His long punting, magnificent backing up of the line and his unconquerable spirit will not be replaced this year. Of the two braces of backs—Richards, Keane, Chadwick and Sharpe—only Richards goes, and Dupee will work hard for full-back. Fincke will have a good chance for quarter, but young Wear is a coming man, and may get it away from him. In either case, it will strengthen Yale at this point.

HARVARD'S problem, like that of Princeton, consists chiefly in the building up of a good line, rather than in developing a strong back field, but she has a better foundation. She keeps Campbell and Hallowell, her crack ends, and Lawrence, her tackle, but she loses Burden and Boal, her guards, and it is not likely that Burnett, center, will be back. Donald, tackle, has used up his four years. For these four places, Fox, Eaton, McGrew and Knowlton, tackles, and Grandon, Sugden, Riggs and C. E. Sargent, for guards or center, are promising men, better, apparently, than Princeton's substitutes. Captain Daly will be quarter-back again, barring injury, and Rex Fincke a strong understudy. The backs ought to be very strong, with such an embarrassment of riches. Only Warren and Parker have gone; Ellis, Sawin, Kendall, Reid, Gierasch, Hersey, Derby, Stillman and Kernan (both of the latter being of baseball fame), remaining. Great effort should be made to develop a consistent, long punter from the back-field this autumn, and thus relieve Hallowell of this extra duty. It hurt his end play last year.

PENNSYLVANIA loses Overfield, her efficient center, and his place will not be wholly filled this season. Hare and Teas, the guards of 1899, will remain, and so will Wallace, who ought to become one of the best tackles this season. If Snover plays again, his work should also be of a high order. The ends will need to be strengthened, and if Folwell, of the '98 team, re-enters, he will help out a point where Penn was weak last season. Outland, her general-utility man, has gone. So has Kennedy, quarter-back; but John Gardner and Potter, the halves used against Cornell, remain, and McCracken will be the ground-gainer of the year at full-back.

IN the colleges of the second group (in football) no startling changes may be expected.

Cornell retains her Freshmen heavy-weights, Pierson, center, and Warner, guard; her

tackles, Alexander and Folger; her ends, Davoll and Taussig. She has also good substitutes for Caldwell's place, if he does not come back. Her crack quarter-back, George Young, may return, and with Morrison, half-back, and Captain Starbuck, who was one of the best full-backs of 1899, also on hand, Cornell's team should be better than that of last season.

Brown has lost two-thirds of her attacking force in the departure of Richardson. She still has excellent men in Whittemore, guard; Sheehan, tackle; Slocum and Cuddy, both high-grade ends, and Washburn, the baseball pitcher, who plays half-back. It is possible that some of her other players of last year may return.

WESLEYAN's heaviest loss this year will be at left guard, where Brown did fine work. His place will not be easy to fill. He was, however, the only senior on the team, save Wing at left-half, so the 1900 eleven should establish the best record of recent years at Wesleyan. The two ends, Captain S. A. Dodds and Cornwall, are particularly strong players.

Williams has her work cut out. She loses Chadwell, the famous colored end; the Seeleys, DeCamp and Black, her heavy line men; and Draper, her fine half-back. She has two good ends left in Cullivan and Rooney; excellent tackles in Captain Simmons and Hatch; and good backs in Moore, quarter, Graves and O'Neil, halves, and Dolph, the drop-kicking full-back. Altogether, the prospects are not rosy, and Coach Hazen will have no child's play in building up as strong an eleven as that of last year.

DARTMOUTH loses two crack backs in Wentworth and Jennings, the latter having been one of the best players on any team last year. Corson, Putnam, Rogers and Boyle, all good forwards, must also be replaced; and around Lowe, guard, Alling, tackle, and O'Connor, end, another line is to be constructed. Dartmouth's task, therefore, resembles that of Williams.

Lafayette's most serious defection is that of Bray, whose four-year service as full-back will long be remembered, but Captain Chalmers and Weidenmeyer, both fine tackles; Trout, one of the best of guards; Bachman, an excellent center, with Hubley, quarter-back, and Knight at half, should make a sufficiently strong nucleus for a thoroughly representative Lafayette team.

COLUMBIA has washed her soiled linen, and promises hereafter to keep it clean. Of last year's team, Captain Wilson, Neidlinger, Miller and Larendon, the professional element, will be missing, but Wright, the ex-Williams guard, will play again, also Smythe and Knapp, good

tackles, and Weeks, Morley and Simons. The former is a poor defensive player, but a fast end runner of the Laurie Bliss type, behind strong interference. Morley and Simons are very strong all-round backs. With new material for the ends and quarter, Columbia should not fall below her average form of 1899.

The Carlisle Indians lose fewer men than the colleges, have no four-year limit, and enjoy the exceptionally able coaching of Mr. Warner, of Cornell. They will not beat Pennsylvania again, and have no game with Princeton, but they will give an excellent account of themselves before the curtain falls.

As might be expected, neither China (where by the way, Waldron and Scales, two former West Point cracks, are distinguishing themselves), nor Philippines, could crowd interest in the Annapolis-West Point game out of military and naval circles.

The outlook for the army seems particularly bright, inasmuch as only four men have been graduated, viz.: The quarter, one guard, one half and the full-back. These are excellent men, but the loss is by no means irreparable, and with the adherence to the principle of home-coaching, and seventy-six candidates in the football squad, there is no reason why the 1900 eleven should not be equal to that of 1899.

Annapolis loses several very strong men; Halligan is one, and possibly Wortman another. Her vacancies will be harder to make good.

It is unlikely that there will be any radical innovations this autumn in methods of play. Mr. Warner's novel but effective formation, with all his forwards concentrated on one side of the line (the play which so overwhelmed Columbia) will doubtless be appropriated or adapted by a number of coaches. Mr. Woodruff is likely to give us one or two modifications of the "guards back," and Capt. Pell will probably make some new use of Cochran's famous "ends behind." Both of these will be different from their usage in former seasons, possibly in some detail of the grouping of the men, but chiefly in the direction of the point of attack. The principle of utilizing forwards as battering rams, starting from a point back of the line, will, of course, be unchanged.

Princeton, Yale and Harvard do not get such offensive work out of their guards and center as Pennsylvania does. Some further utilization of these comparatively unused resources in attack might well be made.

The kicking game is not likely to suffer much by comparison with 1899.

PHOTOGRAPHY.

A NEW TELE-PHOTOGRAPHIC LENS ATTACHMENT.

ALFRED WATKINS, of exposure meter and developing factor fame, who has perhaps done more for what may be called exact development than all other investigators combined, in an illustrated lecture before a recent meeting of the Royal Photographic Society upset some firmly rooted notions regarding the relative properties of most of the modern developers, including the very general belief that while some of them tend to give hardness and density, others favor detail without contrast. The belief that hydroquinone belongs to the first, and metol to the second of these, has led to the very general use of a mixture of the two; but he thinks it would tend to better results if it were generally known that such differences are non-existent. Carefully conducted experiments showed that as regards density and detail, provided the action of each developer was stopped at the proper time, they were all alike, the only difference being in the time required to "start the action" and in the length of the "developing factor."

For the benefit of those not acquainted with the excellent method of timing development discovered by Watkins, I may say that by "starting the action" is meant the time that elapses between the pouring on of the developer and the appearance of the image; and that the "developing factor" is the number of times which that time must elapse before development is complete. Of course the time between the pouring on of the developer and the appearance of the image will depend on various causes, the strength of the solution, the temperature, etc., but, whatever it may be, that time multiplied by the developing factor of the particular developer will be the period of complete development.

The mistaken notions regarding hydroquinone and metol he explains as follows: The former has a long period of appearance under ordinary conditions, and a short developing factor, 62 and 5, while with the latter it is the reverse, 5 and 22. Hydroquinone, taking twelve times as long as metol to appear and reaching full density at five times its time of appearance, has always been allowed to reach that stage; while metol, appearing in a twelfth of that time, but needing twenty-two times that twelfth to complete its work, was generally stopped long before it had done the work that it only required time to do.

According to Watkins, then, it may be taken as a fact that all the modern developers have the same density and detail-giving power, and

that they are also equal in their power of bringing out all that has been impressed by the exposure. They differ only, and differ greatly, in both the time required for the appearance of the image and in the developing factor; but given the necessary time, any one of them will do what can be done by any of the others.

For the benefit of those who wish to try the Watkins method of timing development, I append the latest developing factors of a few of the developers referred to:

Metol	22	Ortol	8
Adurol-Schering	5	Kachin	9
Hydroquinone	5	Glycin	6½

RESTORING YELLOWED PRINTING PAPER.

AMATEURS who print only occasionally, and on gelatine or collodion printing-out paper, are apt to suffer loss from its getting yellow through age or improper keeping. Such paper may be restored to its original state by immersion for a few minutes in a two per cent. solution of ammonium persulphate.

KEEPING PLATINUM PAPER.

IAM often told that platinotype paper will not keep for any length of time in a condition that will give the fine velvety blacks and transparent shadows by which it is characterized, and which are so easily got when it is fresh. This, however, is the fault of the photographer, rather than of the paper. It will keep indefinitely in the tins in which it is sent out by the makers, so long as they are not opened. Atmosphere, even in its driest state, contains some moisture in the shape of aqueous vapor, enough, indeed, in the air contained in the tin to injure the paper which it was meant to preserve if it were allowed to act on it; but, in addition to the paper, the tin contains a piece of calcium chloride, generally fused, although sometimes only dried, for the purpose of absorbing that moisture, and so long as it does that effectively the paper will keep in good condition. But a lump of even the fused chloride will absorb only a certain quantity of moisture, and consequently when the tin has been opened and closed several times the chloride will soon have absorbed all the moisture it can, and the paper will be left unprotected.

The remedy is simple. Place the moisture-laden chloride in any suitable vessel; an old iron spoon answers admirably; and hold it over the fire or a hot flame till fused. The fused chloride should be poured on a flat stone, and as soon as cold, wrapped in paper and returned to the tube. If this is repeated as often as the chloride becomes slightly moist the paper will keep indefinitely.

DR. JOHN NICOL.

BICYCLING.

BICYCLE SIDE-PATH TRUNK LINES.

OUT of the road conditions of bicycling have at length evolved two postulates: (1) No roadway in a city, unless paved or macadamized, is fit for wheeling during wet weather if used by other vehicles; (2) in the country, safety and convenience demand that bicycles be separated from horse-drawn vehicles, because there is no immediate prospect of wagon roads reaching the needed condition of improvement in this generation of wheelmen.

The result has been the development of what, in the East, is called the "side-path," and in the West, the "cycle-path," or "cycle-way." A cycle-path being narrower and cheaper to construct than a wagon road, a stated amount of money will make a correspondingly longer path.

That a public conveyance brought to such mechanical perfection, and so universally used as the bicycle, in the manufacture of which so much capital is invested, should have received so little recognition by highway authorities is the occasion of surprise among thoughtful men.

But the conviction is strengthening and rapidly spreading that bicycle-paths should be constructed by the public authorities with the use of public funds. The proposition that it is the duty of the highway authorities to improve the highways in such a manner as the public needs demand, would seem to require no argument to support it. This duty was recognized by the Supreme Court of Minnesota, recently, in a case in which the League of American Wheelmen employed special counsel to establish that principle and to sustain a law prohibiting the use of cycle-paths by any other vehicle.

THE L. A. W. has taken action directing the proper committees to give special attention to the construction of cycle-paths and to encourage the co-operation of the several State divisions in the construction of inter-state paths. Prior to the L. A. W. Assembly meeting in February last, no official recognition by the National Highway Committee had been given to cycle-paths, exclusive attention having been given to wagon-road improvement.

The most interesting feature of the work contemplated is the construction of trunk lines. The Minnesota division commenced, last January, the preliminary work of agitation and organization for the construction of a path from Minneapolis and St. Paul to Chicago.

The plan of operation in Minnesota is to secure enough L. A. W. members, and create sufficient interest along the line of the path, to demand from the public officials a portion, if not all, of the money needed for the path. Three

routes for the path have been tentatively selected, and at the present time bids for the path along different routes contemplated are active. This path will be five hundred miles long.

Another trunk line in contemplation is from Chicago to New York, a distance of nearly one thousand miles. The plans for securing funds will vary as the laws of the different States vary, but the construction of these two trunk lines is assured, provided only that the national officers receive hearty co-operation.

This is only a beginning. Hundreds of miles of paths have already been constructed in the United States. These will be connected with the trunk lines, and the construction of trunk



A Minnesota Cycle-Path.

lines will stimulate the construction of many more paths as feeders to them. For example, the suggestion comes that Omaha should be connected with the Minneapolis-Chicago path, that Boston should be connected with New York, that New York and Washington should be connected, utilizing the famous roads of New Jersey. A path from Baltimore to Washington is also a possibility. These are but a few of the important paths that will be demanded. The League being a national organization, with working branches in every State, the limit to the mileage of paths which may be constructed under its auspices in the near future will be fixed by nothing but its needs and intelligent and enthusiastic co-operation.

But cycle-path construction is not now, and probably will not in the future be, confined to operations of the character above described. The construction of paths as a private business venture with a view to producing dividends upon the capital invested has occupied the attention of capitalists for several years.

A. B. CHOATE.

THE THOROUGHBRED.

IT is really good news that Mr. Whitney contemplates sending Kilmarnock to England to try for the Ascot cup in 1901. The son of Sir Dixon will then be a four-year-old, and his participation in the great Ascot cup event should afford an opportunity for a reliable test as to America's ability to breed "simon pure" stayers. Our English cousins claim—and very justly, too—that our previous importations have been distinguished for lack of genuine staying ability. The Ascot cup is at two miles and a half, each horse carrying weight for age according to a prescribed scale. Kilmarnock, while not a strictly great horse, is nevertheless thoroughly at home at the staying game, and his meeting with the Prince of Wales's Diamond Jubilee in the Ascot trophy would be an event of the deepest international interest and importance.

THE starting problem continues to vex a large army of close observers. A goodly majority of the leading horsemen are at heart dissatisfied with the use of the barrier, but consider it more discreet to suffer in silence rather than to antagonize the authorities, who at present appear to be wedded to the barrier. It is true that the veteran J. F. Caldwell made a disappointing showing when starting on the old plan (without the barrier) during the early days of the recent Saratoga meeting. The hasty action of the authorities in peremptorily demanding the reinstatement of the barrier, however, was diametrically opposed to the policy of patience and toleration which obtained during the weeks of shockingly bad starts during its early days.

NOR to be outdone by our winning jockeys and horses, the well-known American trainer, John Huggins, ranks with the very best of the English trainers in his achievements during the present season. Up to the close of the summer racing, Huggins's record showed 28 races of a value of £20,291, won by 21 horses, and it is significant that his only leader in the training list, R. Marsh, should have acquired no less than £22,860 of his total of £32,326 by reason of the four classic successes of the Prince of Wales's Diamond Jubilee. Huggins is private trainer to Lord William Beresford, with whom Mr. Pierre Lorillard—Huggins's original employer—was in partnership during his English campaign in 1897-8.

THE feature of the late summer racing in America was the reappearance of "Tod" Sloan, who made a flying trip from Europe for the purpose of riding Hon. W. C. Whitney's colt, Ballyhoo Bey, in the \$33,000 Futurity Stakes at Sheepshead Bay. *Veni, vidi, vici* was most unequivocally inscribed upon the Sloan banner

by his achievement in that race. His handling of his mount was masterly; so much so, indeed, that many close observers received the impression that Mr. Whitney's colt won the big event more because Sloan out-rode the contending jockey than by reason of the Bey's superiority over the Messrs. Keene's Olympian.

The fouling in the Flatbush Stakes a week later was a most unfortunate occurrence. To all appearances, the jostling was inaugurated by a swerve on the part of the Messrs. Morris's colt, Smile. The Keene colt, Tommy Atkins, was the chief sufferer by the *contretemps*, the incident doubtless causing his head defeat by Ballyhoo Bey. Neither the betting on the Flatbush nor the incidents of its running bore sufficient appearance of fraud to justify such a claim, as Mr. Keene subsequently realized—since his assertion that he "would never run another horse on the track" was followed by the steady appearance of the "white, blue spots," during the remainder of the meeting.

WHILE emphatically disclaiming membership to that coterie who believe the turf to be honey-combed with fraud, I, nevertheless, feel the vagaries of that great racemare Imp at Brighton Beach to have been thoroughly unsavory, and furnishing a genuine case for official discipline. Her past career may have been more or less checkered, but her startling improvement in the Brighton cup—for which valuable prize she compelled Ethelbert to run a record-breaking race to beat her, close upon her two moderate displays in unimportant races—reminded me of nothing less than the in-and-out performance of the redoubtable Barnum along in the 'eighties.

Another very revolting case—on the surface, at least—was the remarkable improvement made by the steeplechaser Charagrace, owned by Mr. Frank Beard, in the interim of only a day between two races at Sheepshead Bay. I am only surprised that Imp should have escaped at Brighton the official censure which Charagrace most deservedly provoked at Sheepshead Bay.

Ethelbert's wonderful performance in the Brighton cup was a striking demonstration of the unmistakable improvement of the thoroughbred, for the two miles and a quarter in 3 minutes 49 1-5 seconds—with 124 pounds in the saddle, too—scattered to the winds all former records at the distance. Ethelbert is a genuinely high-class horse, but has had bad luck, to which is due several of his defeats in 1899 and 1900.

W. H. ROWE.

THE HARNESS HORSE.

THE New England Trotting Horse Breeders' Association, at their recent meeting at Readville, Mass., offered a prize cup which was so eminently practical in its intentions and results that similar trophies should be awarded at every trotting-race meeting in the land. The conditions attached were: "The Roadster Cup for Trotters. For a horse winning his race equipped as a gentleman's road horse should be. Must wear plain over-draw or side check (or no check); no boots, but quarter boots; no toe weights; open or blind bridle; pullers not to be considered; fast time not to count; the judges to award the prize to the first race winner which meets the requirements."

Nothing more practical in idea or advantageous in method can be imagined for bringing to public recognition horses possessed of the essentials for road or speedway work in amateur hands, and the selling value of any winner of such a prize will be greatly enhanced; since not only is he a winner, but his qualities as a roadster have been strongly indorsed. Of course, he may not, after all, be the ideal animal for the purpose, because he may shy or kick or behave other than a road horse should in various ways, but he will have proved himself possessed of the essentials of easy driving qualities, good balance, good manners and light mouth—which are the fundamental requirements.

It will be noticed that pacers are not encouraged as typical gentlemen's roadsters. True, most pacers are easy drivers, very "brushy" and quick on their feet, and generally afford more speed for less money than trotters of equal class—but the American trotter is the animal sought to be encouraged, and not his shambling, shuffling, stiff-legged, side-wheeling relative.

RETURNING visitors to the fairs and horse shows of the West and South bring flowery tales of the prosperity and general financial independence of the farmers of those sections, and Munchausen-like narratives of the enormous crops of everything—except horseflesh! On this point the scarcity of material and absence of merit is unanimous, and we shall in the future see what we shall see, as to prices and values.

The autumn horse-show season is drawing to a close. A phenomenally large number of exhibitions of varying importance have been held all over the country, but little new or desirable material has been uncovered, and the winners have mostly been veterans for "lo! these many years." The new material generally proved to be that which had been passed by in other years,

and was now submitted to competition for which it had hitherto been deemed unequal. The little shows are really the "sporting" shows that help the good cause along by slight but direct and constant impulse, and the little owners—the men of one or two representatives—are the people that are the real backbone of the whole show fabric, and the ones who make the success of these undertakings not only possible, but assured.

IN the matter of appointments for heavy harness work we Americans run to absurd lengths—when we do anything at all in the premises. The curious part of it is that the people who would fain pose as authorities are, not a few of them, possessed of neither horse nor vehicle; while in the equipages of others, more fortunately circumstanced, the proprieties are more honored in the breach than in the observance. The plain fact of the matter is that half the so-called rules attempting to govern such matters have no practical or sensible ground for existence. Certain harmony of caparison will commend itself to every one who has an eye for neatness or taste for detail, but there the matter will probably and properly end, so far as the average horseman goes. There is nothing more tiresome and impossible to any one who really uses horses than all the stupidly invented rules which would tend to prevent him from driving his wife's trap, or vice versa; or cause his heart to sink if he were caught with a horse-shoe buckle where a square one should have been; or if he had committed the hopeless solecism of buckling his breastplates round his collars instead of through the inner curve of the kidney link. Taste carried to excess becomes vulgarly conspicuous, and fads founded on fancy can never endure.

As time rolls along, the prejudice against docking is growing, slowly and surely; or shall we say that fashion is changing (which would probably be the more truthful statement)? Even the banged or squared tail has disappeared from our race horses; most of our modern polo ponies wear a switch, or a full tail, and not a few fashionable carriage horses are to be seen which have not been subjected to mutilation. No more absurd, vicious, or senseless fashion was ever adopted, and especially in a climate where insects in myriads exist full seven months of the year, while for all run-about, buggy, or light-cart use, the long tail affords the only protection from flying gravel, dirt, and filth; a docked tail, once shut upon a rein, is both difficult and dangerous to remove.

F. M. WARE.

NOTABLE PERFORMANCES AND RECORDS.

Conducted by Charles Edward Patterson.

MALCOLM WHITMAN'S work at the lawn-tennis nets this season confirms the strong impression of 1899 that he is really in the championship class as based on the standards of past years, and that for 1900 he is undoubtedly alone in it. Larned, despite his well-merited victory in the All Comers' at Newport, is not the Larned of 1894-7; Wrenn, E. L. Hall, Chace, and R. P. Huntington, who occasionally emerge from athletic seclusion to renew their youth, are not the men of former days. Davis is too streaky to maintain a real championship average. Whitman has this season acquired four bowls—the Middle States, the New York State Championship, the Longwood, and the Newport, which becomes his personal property now on his third successive win.

R. D. Sears won two challenge bowls at Newport, O. S. Campbell one, and R. D. Wrenn one.

LAWN-TENNIS CHAMPIONSHIP DOUBLES, 1900.

H. H. Hackett and J. A. Allen, Winners of Eastern Double....	Alexander and Little, 0-6, 6-4, 7-5, 5-7, 6-2.	Davis and Ward, 6-4, 9-7, 12-10.
F. B. Alexander and R. D. Little, Winners of Western Double....	Davis and Ward, Champions 1899.	Champions 1900.

INTERSCHOLASTIC CHAMPIONSHIP.

Irving Wright (Harvard) beat Fred M. Breinig (Yale), 6-1, 6-3, 7-5.

AMERICAN LAWN-TENNIS, 1881-1900.

SINGLES. (CHAMPIONS.)

1881, R. D. Sears. 1882, R. D. Sears. 1883, R. D. Sears. 1884, R. D. Sears. 1885, R. D. Sears. 1886, R. D. Sears. 1887, R. D. Sears. 1888, H. W. Slocum. 1889, H. W. Slocum. 1890, O. S. Campbell. 1891, O. S. Campbell. 1892, O. S. Campbell. 1893, R. D. Wrenn. 1894, R. D. Wrenn. 1895, F. H. Hovey. 1896, R. D. Wrenn. 1897, R. D. Wrenn. 1898, M. D. Whitman. 1899, M. D. Whitman. 1900, M. D. Whitman.

ALL COMERS.

1881, R. D. Sears. 1882, R. D. Sears. 1883, R. D. Sears. 1884, H. A. Taylor. 1885, G. M. Brinley. 1886, R. L. Beekman. 1887, H. W. Slocum. 1888, H. W. Slocum. 1889, Q. A.

Shaw, Jr. 1890, O. S. Campbell. 1891, C. Hobart. 1892, F. H. Hovey. 1893, R. D. Wrenn. 1894, M. F. Goodbody. 1895, F. H. Hovey. 1896, R. D. Wrenn. 1897, W. V. Eaves. 1898, M. D. Whitman. 1899, J. P. Paret. 1900, W. A. Larned.

RUNNERS UP.

1881, W. E. Glyn. 1882, C. M. Clark. 1883, James Dwight. 1884, W. V. S. Thorne. 1885, W. P. Knapp. 1886, H. A. Taylor. 1887, H. A. Taylor. 1888, H. A. Taylor. 1889, O. S. Campbell. 1890, W. P. Knapp. 1891, F. H. Hovey. 1892, W. A. Larned. 1893, F. H. Hovey. 1894, W. A. Larned. 1895, W. A. Larned. 1896, W. A. Larned. 1897, H. A. Nisbet. 1898, D. F. Davis. 1899, D. F. Davis. 1900, G. L. Wrenn, Jr.

SUMMARY OF WOMEN'S AMATEUR CHAMPIONSHIP OF THE U. S. GOLF ASSOCIATION,

SHINNECOCK HILLS, SOUTHAMPTON, L. I., AUGUST 29—SEPTEMBER 1, 1900.

Qualifying Score.	August 29th.	August 30th.	August 31st. September 1st.
104 Miss Genevieve Hecker, Wee Burn.....	Hecker,		
104 Miss F. Ethel Wickham, Shinnecock.....	4 up, 2 to play		
108 Miss Eunice Terry, Ardsley.....	Terry,		
110 Miss Harriet Curtis, Essex County.....	2 up, 1 to play	Terry, 2 up, 1 to play	
108 Mrs. N. Pendleton Rogers, Plainfield.....	Rogers,		
110 Miss Ruth Underhill, Nassau.....	1 up		
96 Miss Frances C. Griscom, Merion Cricket..	Griscom,		
109 Mrs. Edward A. Manice, Pittsfield.....	3 up, 2 to play	Griscom, 4 up, 2 to play	
94 Miss Beatrix Hoyt, Shinnecock.....	Hoyt,		
106 Mrs. C. H. Parrish, Shinnecock.....	7 up, 6 to play		
109 Mrs. Caleb F. Fox, Huntington Valley....	Fox,		
106 Miss Caroline Livingston, Westbrook.....	5 up, 3 to play	Hoyt, 1 up	
101 Miss Margaret Curtis, Essex County.....	Curtis,		
109 Mrs. A. DeWitt Cochrane, Ardsley.....	7 up, 6 to play		
111 Miss Grace E. Keyes, Concord.....	Keyes,		
107 Mrs. H. Toulmin, Merion Cricket.....	1 up	Curtis, 4 up, 3 to play	
			Griscom, 1 up, in 19 holes
			Griscom, 6 up, 4 to play.
			Curtis, 1 up, in 20 holes

Twentieth Annual Championship of the United States National Lawn Tennis Ass'n—Newport Casino, Aug. 14-21, 1900.

[illegible]



Mr. A. L. Ritter, Mr. Spencer Crane, Mr. De Forrest,
In the Newport Races.



Mr. W. K. Vanderbilt, Jr., in his French Racing Machine, Going at the Rate of 35 Miles an Hour.



Society's Enclosure, Aquidneck Park, Newport.

The Automobile Races at Newport.

THE AUTOMOBILE.

LEST the attention of the engineers, electricians and chemists who are puzzling out the problems of the automobile should be concentrated unduly on the mere question of speed, it cannot be reiterated too often, or too forcibly, that the automobile is an aristocrat, and that its main market will in the end be found among the leisured and wealthy, to whom lightning speed is not the all-absorbing thing desired.

What is now seeking solution is a design combining strength, elegance, and lightness in form and fittings; comfort in use, ease of management, sureness in grade-ascending capacity, and automatic in power of stopping and of guidance. Vehicles, in fact, light yet of high power and able to maintain their speed over considerable distances.

When this is accomplished, and it is beyond the experimental stage in many departments, then the automobile will have that ear-mark of "Independence" which will be its greatest charm and claim, and it will become the special appanage of those well able to avail themselves of its luxury, speed and comfort.

THE vista that is opened by a combination of the various automobiles and good roads is practically limitless. Given these conditions, one can move practically one's whole establishment, bag and baggage, from the city to the country, and *vice versa*, at a few minutes' notice. It is but to give the word and all can be transported: guests in the appropriate carriages; domestics in others suitable; baggage in those designed for such purposes; and merchandise, even perishable, a hundred miles or two, and set up in the camp, or the country-house, without friction, or time-tables, or vexatious delays.

Yet this is but a fraction of the functions in store for the perfected social automobile and its satellites.

WITH the racing contests at Newport, R. I., on the 1st of September, the automobile in America entered a new field. There had previously been occasional trials of speed between rivals of different designs, but no formal races given under official cognizance.

The contests at Aquidneck Park, near Newport, were arranged by the National Automobile Racing Association, of which Mr. W. K. Vanderbilt, Jr., is president, and the races were on a half-mile track over a five-mile course, which necessitated for each heat ten rounds of the track. The track is well designed, sixty

feet wide at the turns; but on this occasion it was so dry that the dust interfered materially with the pleasure of the onlookers, of whom some eight to ten thousand had gathered.

EACH class was confined to machines of similar motive power, *i. e.*: (1) gasoline or explosive, (2) steam, (3) electric storage batteries, and (4) tricycles with gasoline as the propelling power.

Each machine had to carry its full seating complement of passengers. Naturally at this stage of the automobile's evolution few comparisons



Mr. John Jacob Astor Driving his Steam Automobile.

of value could be made where so many different machines were engaged. On the other hand, the times in which the heats were covered are instructive; for instance, in the second heat of the race for electric vehicles, A. L. Riker's machine covered the five miles in 10m. 44s. In the final heat of the race for steam vehicles, S. T. Davis's machine did the same in 10m. 45½s., whilst the race for gasoline vehicles was won by W. K. Vanderbilt, Jr., in 8m. 53½s.

The spirit of competition is infectious. Scarcely had the tires at Newport done revolving ere Alexander Winton, of Cleveland, who is an enthusiast and participated in the recent Paris-Lyons race, sent to Messrs. W. K. Vanderbilt and Albert Bostwick a challenge for a one-hundred mile race on a smooth track. On

The Automobile.



A Recent Type of the Auto-Cycle.

such spirits is the future of the automobile based.

The latest claimant for recognition is a machine propelled by nothing less explosive than gunpowder. Really, it would be somewhat startling to some nerves to remember that their next neighbors were being propelled by minutely recurring explosions of gunpowder. A ten-pound canister of powder is claimed to be sufficient for a three-hundred-mile trip; but then—well, such wonders in mechanics have been ac-

complished in the automobile world, that I should be loath to prophesy anything but success even to this apparently bold idea.

THE influence of the Automobile Club of America will hereafter be against the encouragement of speed on the public highway. The rule of the club, as recently adopted on this point, reads:

"It is the opinion of a majority of the present Board of Governors that the racing of automobiles by the members of the club on the public highways of the country at excessive speed, except by the consent of the proper authorities, is to be discouraged as endangering the lives of the public and opposed to the best interest of automobilism."

The above rule, or rather, suggestion, is the only one in the racing subject that has been definitely fixed.

As a matter of fact, racing automobiles are the least desirable for purposes of general utility. The public wants a vehicle that will not break down on an ordinary one-hundred-mile run, and that can do a tolerable amount of hill-climbing.

Distinct progress is evident in the adaptation of automobiles to the severe work which present road conditions require of them. Motive powers are gradually being strengthened; uniformity in operation is nearer approached, and the integrity of each part better maintained. Less attention is being paid to the discovery of new powers and novel means, and more care given to perfect that which is already had.

The result is a considerable decline in the number of mishaps due to failing powers and broken parts. There is a corresponding advancement in the assurance one may feel in giving his machine a wider range of travel. The area of the motor vehicle's use is to be extended principally by the growing confidence of users in its capabilities as proven in service.

Its motive mechanism is no longer the weakest part of an automobile's structure. That distinction has been shifted to its pneumatic tires—with very little real prospect for relief until rubber is rendered equal to the severe strain of carrying heavy loads at speed over rough surfaces, or a substitute of superior wearing capacity is found.



An American-Built French Motorette.

ROQUE.

THE 1900 CHAMPIONSHIPS OF THE NATIONAL ASSOCIATION.

SCIENTIFIC croquet, under its new name Roque, gathered representatives from a score of clubs at Norwich, Conn., in a series of contests for the nineteenth annual championship and the Van Wickle badge from the 21st to the 25th of August. The weather conditions were in the main favorable, the exception being rain on the fourth day, which washed out several of the courts and delayed play.

There were eighteen entries, a larger number than usual, in the first division, fifteen of whom competed, and every player contested fourteen games. Ten entries in the second division and six in the third.

Practice began early this year at all the Roque centers. As a consequence the average quality of the play at the tournament was high. Most of the old-time players were present, for those who know this game are enthusiasts. There was Dr. Davenport, three score and ten, the venerable dean of the association, accurate and deliberate in his shots and correct in his judgment; and, by contrast of age, there was C. G. Williams, the champion of this and of last year, just old enough this year to cast his vote. His play had been superb all summer,

and he won a clean first. He plays left-handed, and who ever saw a poor left-handed player? He seems not the least concerned at any stage of the game, but his blows are telling, and fortune seems always to favor him.

C. G. Strong, of New London, six feet in his stockings, was next in merit, and he has few superiors. His games are played with mathematical

accuracy, every feature being taken the greatest advantage of.

Dr. Veasey, of Wilmington, terrible in execution, was up among the "giants." Cool, calculating and precise, he runs the arches as if they were oiled. Before his opponent realizes it, his game is nearly finished, and one wonders how it has been done.

S. L. Duryea, who won the Van Winkle badge and was a former champion both at Norwich and Washington, is just out of the High School in Washington, and is a brilliant young player, as his previous record shows.

W. H. Wahly, Jr., of Washington, who completes the list of strongest players in the first division, is a hard hitter and by far the boldest player of the first five.

IN every division the playing was the finest yet exhibited. Never was there so much uncertainty as to where honors would finally rest. As will be seen below, C. G. Williams won the first prize in the Championship Division; Strong, Duryea, Wahly and Veasey were tied for second prize. Wahly in the play-off defeated Duryea without letting his opponent have a single chance. Wahly then beat Strong easily in 32 minutes, making the circuit in two plays and showing as fine roque as was ever seen.

SCORE IN CHAMPIONSHIP DIVISION.

	Won.	Lost.
C. G. Williams, Washington, D. C.....	11	3
G. C. Strong, New London, Conn.....	10	4
B. R. Veasey, Wilmington, Del.....	10	4
W. H. Wahly, Washington, D. C.....	10	4
S. L. Duryea, Washington, D. C.....	10	4
Frank Sisson, New London, Conn.....	8	6
Charles Jacobus, Springfield, Mass.....	8	6
N. L. Bishop, Norwich, Conn.....	7	7
J. B. Bell, Wilmington, Del.....	7	7
P. N. Peck, Washington, D. C.....	7	7
P. W. Coleman, Washington, D. C.....	5	9
J. N. Davenport, Northampton, Mass.....	4	10
C. B. Denison, Pomona, Cal.....	3	11
W. Apgar, Trenton, N. J.....	3	11
C. M. Bryant, Washington, D. C.....	2	12

SECOND CLASS.

C. A. Littlefield, Chelsea, Mass.....	6	3
Frank Foss, Norwich, Conn.....	6	3
W. H. Congdon, Norwich, Conn.....	6	3
L. J. Baker, Washington, D. C.....	5	4
J. E. Webb, West Chester, N. Y.....	5	4
Frank H. Morris, Washington, D. C.....	5	4
J. B. Hickman, Wilmington, Del.....	4	5
C. S. Wagoner, Philadelphia, Pa.....	4	5
Samuel Dudley, New London, Conn.....	2	7
W. E. Dwight, Melrose, Mass.....	2	7

THIRD CLASS.

A. L. Williams, Washington, D. C.....	10	0
H. P. Howard, Jr., Washington, D. C.....	7	3
J. D. Howard, Washington, D. C.....	7	3
S. B. Prentice, Providence, R. I.....	3	7
G. S. Van Wickle, New Brunswick, N. J.....	3	7
G. P. Peterson, Providence, R. I.....	0	10

CHARLES JACOBUS.



Charles G. Williams.
Champion 1899-1900.

AUTUMN ANGLING.

THE BLACK BASS, MASCALONGE AND PIKE.

ALL through the month of October, and often until late in November, the black bass in the Middle States, will, under favorable conditions, rise to an artificial fly in running water. Particularly will they do so in the Indian Summer days of November.

The black bass is not only a late biter but an early spring feeder. I have taken them with an artificial fly in the Schuylkill River, fourteen miles above Philadelphia, on March 22nd, when a rim of ice extended a foot or two from the banks of the pool. On the other hand, I have caught them in the Susquehanna River as late as November 2nd. These bass in their autumn migrations had followed the young shad in their voyage to the sea, down the Susquehanna River, and were feeding sumptuously upon the delicious fingerlings, the bodies of which were sheened in bright silver and the flesh translucent.

The black bass take the line in the deep waters of lakes all through the winter, but if a sudden change of temperature comes, as sometimes happens in November, when the thermometer falls 20 to 30 degrees, and the bass are at the time in comparatively shallow water, they will often be found benumbed and floating helpless on the surface. After such a change of temperature it is useless to fish for bass in rivers; they have either gone down stream to deeper water or sought safety in hibernation, in which state they are sometimes found in hollow logs sunken in water of only a few feet in depth.

MASCALONGE are in their prime of flesh and vigor of fighting qualities in the autumn months. They are taken through the ice during the entire winter season, but an October or November "mossbacker" (as they are locally termed) is the peer of any fish that flirts a fin. There are three species, one from Lake Chautauqua, N. Y., which has dark spots vaguely outlined and narrow dark cross shades or crossbars; another species from the lakes of Northern Wisconsin and Minnesota has no spots, and a third, the typical fish, reaching a weight of 100 pounds or more, is a habitant of the great lakes, their outlets and tributaries. It has distinct black spots on a light background and may be distinguished on sight from the pike, which has whitish or yellowish spots on a darkish background.

The mascalonge or muskalunge, muskalonge, maskinongè, muscallunge, *et al.*, is usually caught by trolling with a large spoon, generally a No. 8, without the addition of any natural

bait, but the most scientific and enjoyable method is by casting the spoon or live minnow along the edges of the lily pads or other plant growth, the boat being rowed about seventy-five feet distant from the line of vegetation.

When hooked the mascalonge usually leaps at least once into the air to the height of about three feet and then settles down to a deep, strong pull, with desperate surges in all directions. The leap is more constant and characteristic in the Wisconsin species. Those of the St. Lawrence system, though occasionally acrobatic, are generally content to fight fiercely at or near the surface, before resorting to deeper water, where they have been known to fight an hour or more before they were brought to the gaff.

THE great Northern pike, originally so named by Frank Forester, grows to a length of four feet or slightly more, and a weight of forty to fifty pounds, but specimens of that size are now only taken from virgin waters. It may be known by its light-colored spots and a grayish V-shaped speck which appears on each scale. It is called the "pickerel" very generally in the Northern and Western States, a misnomer, which leads to much confusion among angling writers, and one that gathers force from the fact that the perch-like, walled-eyed pike or pike-perch is universally called in the West "the pike," and in some sections of the Northwest, to render confusion worse confounded, the pike-perch is known exclusively as "the pickerel." In this connection it should be noted that the most common of the true pickerels found in waters west of the Alleghanies never grows larger than twelve inches, and may be recognized by its greenish-gray color, curved streaks on its sides and dark bars extending downward and forward from the eye.

THE large pond pickerel, with irregular reticulation or crossbars on the sides, and no spots, is seldom found west of the Alleghanies, except in the Ozark regions. It grows to a weight of six to ten pounds and is very abundant in some of the lakes and large rivers of Sullivan County and rather more northern sections of New York and in the New England States. The pike and the pickerel are usually taken by the same methods as those used in mascalonge fishing. When still angling for them it is best to give line until the fish start to run the second time. They halt, as a rule, to turn the minnow bait and swallow it head first, after which they are easily hooked.

W. C. HARRIS.



ON THE ROAD.

OUTING

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MAKING THE AMERICAN HEAVY HARNESS HORSE

By F. M. Ware

A FEW years ago—and it really is but a little while—social and financial reasons, and the wonderful educational influence everywhere of the horse show, caused a demand for horses possessed of a more or less perfection of action, and of conformation and manners distinctly different from those which had been in public favor for many previous years. Presto! our fashionable equine purveyors, both wholesale and retail, hunted up the raw material; taught it the strange, new action in vogue; trimmed it, and set it forth to the fashionable taste in large quantities, and in a state of perfected development. The product of this energy and intelligence proceeded to defeat decisively and completely at their own game the French coach horse and the hackney, animals which had been most carefully bred for generations to develop the size, action, style and manners suitable for the most exacting usage to which a horse can be put, that of fashionable heavy harness work.

We Americans generally run to extremes, and out-Herod Herod in whatever we undertake. Therefore, no sooner did Dame Fashion demand action than away we went to the limit. Hysterical high-steppers, equine contortionists and four-legged acrobats swept the board in our show rings, and did (for a period) extraordinary things on our park drives. "Action" was the cry, and the true-level, all-round, well-balanced mover was totally neglected. Realizing later that

every horse has two ends, and learning from English lips that "they must go 'orf their 'ocks, yer know," straightway we traced to his stall every horse that could pull his hocks; dragged him forth to the light of day; and even if a bit (and too often more than a bit) string-halted, he forthwith met his reward in the arena, and many shekels were obtained for his possession.

Then the fashion for speed arose, and it is in vogue to-day; everything must be able to go along. Your buyer wants to see a 1,400-pound brougham horse go a three-minute gait in the park (although he knows that anything over seven miles an hour would land him before the bar); your carriage and phaeton horses must "step and go on"; your runabout horse must have a fast record, although, if you would stop to think, you would know that by depriving him of a tail which God gave him as a balance and a rudder; by changing his poise, etc.; by heavy shoes and by sharp biting, you have totally disarmed him, and rendered it impossible in most cases for him to even approach his former feats; and if you doubt it, hold your watch on him and see.

Throughout all this the American-bred horse of good size, quality, speed and endurance has, in the evolution, become a heavy harness horse factor. He is bringing remunerative prices in both the home and the foreign markets, and breeders should familiarize themselves with every phase of the situation, so that they

may intelligently procure and maintain their holdings of reproductive stock, and get into a position to supply the demand which in the future must be greater.

The peculiarity of the breeding situation here has hitherto been that its operations have for the most part been confined to the production of the trotter and of the race horse only, although there are some of those engaged in the business who have believed in the establishment of a distinct heavy harness type, and these have imported, and are using in minor quantities infusions of coaching and heavy harness horse blood from England, Russia, Germany, France and other countries. Naturally, we should turn to the older countries, where such types have long prevailed, for infusions of the blood upon which European civilization has set the *cachet* of its approval.

So distinct is this movement, indeed, that there are even organized associations

blood are necessary, and that our native trotting-bred horse does not produce in quantities a consistent and marketable type.

In show ring and market, at home and abroad, our native horse has been found convertible to heavy harness use when properly trimmed and trained; but, figuratively, we have killed the goose that laid the golden egg, for these successful individuals have been, alas! too often the very foundation of our stock—stallions and mares which might have been available for further propagation to-day, but which are now lost to the stud.

To the American trotter has been awarded the praise and laurels for affording the crude material from which the wonderful heavy harness horse of to-day has been created. This is true, but it is only part of the truth. Most of our high-class animals have been *trotting-bred*, but there the line must be drawn. Probably



Photo by Schreiber.

A First Prize Winner. Owned by Mr. Marion Story.

for the purpose of propagating and acclimatizing certain European breeds, each with its coterie of followers and true believers, trying (as yet with slight success) to convince us that new blendings of

the trotting cross was the little leaven that rounded up the whole; but in the expressive current slang, "there were others," and beyond a doubt the typical heavy harness horse of to-day has to

thank other sources (the drop of Cleveland bay, French coach, French trotter, Percheron or other "cold blood") for his size, his bone, his good top-line and his graceful carriage.

Too many of the trotting pedigrees dished up with the modern carriage horse savor of the old story of the Yorkshire breeder, who "could prove Waxworks' pedigree by old Bill Jones, if he wor alive—but he died fifty year ago." Trotting horse breeders and dealers must not object if the public refuses to accept the pedigrees which run, "by a second son of George Wilkes, and out of a mare said to be by Cassius M. Clay," as either authentic or convincing. A few months' freedom from decorative shears and resin-tipped fingers will provide more than one of our high-class (said-to-be), trotting-bred, heavy harness horses with a fine crop of "whiskers on his heels," as the grooms say, in the way of heavy fetlocks.

That there have been quite a number of genuine straight-bred trotters—not trotting-bred only—among our champions and best representative heavy harness horses, every one who has been interested knows; but they have not been as many as one would expect.

The hackney and his direct descendants have given us but few desirable animals. This horse, so far as we can judge in America, lacks snap, energy and endurance; while his choppy knee action with little shoulder motion, is both tiring and tiresome. The best criticism ever passed upon the hackney, as presented to us in America, was that of the road rider who said that he preferred of all others the hackney for a park horse. Questioned as to his reasons, his reply was: "I like them because they save so much trouble. You never have to bother to turn out to pass anybody—every one passes you!"

That the promoters and breeders of this horse have been sadly remiss in the manner in which they have failed to exploit

him; and have by their (lack of) methods made of him more or less a byword and a jest, is sincerely to be regretted; and when the animal has passed the stage of the rich man's toy, which he now occupies, and reached the hands of practical,



Photo by Schreiber.

Pharo, a Philadelphia Prize-Winner, Owned by Mr. Horace Smith.

energetic, live horsemen—not mere fad-dists or dilettante amateurs—then he will most surely prove himself to be a most valuable factor in, and component part of, the horse of the future—which is surely coming, and which shall combine all that is best and greatest of trotter, hackney, French coach horse, French trotter, thoroughbreds and Percheron (yes, even Percheron!) into a superb whole which shall make him recognized world-wide as the grandest type extant—the American Heavy Harness Horse.

One hopeful feature is the extent of the breeding ground available. At present we are obtaining, or have recently secured, the greater proportion of our heavy harness horses from the West; and since modern methods of feeding oats and other grains in preference to, or in proper combination with, corn have prevailed, no better, more enduring or finer finished animals have been found anywhere than in the Middle and Far West—indeed, Montana, California, Wyoming and other distant sections of the country have been turning out some grand specimens, and not receiving the credit due therefor. Kansas also has been furnishing to our markets animals of the very highest types, but the prejudice which has existed against horses coming from that section (because of doubt as to their proper edu-



Photo by Schreiber.

Magnum, Owned by Mr. A. H. Moore.

cation), has caused sellers to be chary of confessing the fact.

Northern New York has provided innumerable good animals, and is still doing so, but many of these have, as the dealers say, "drunk Ohio water," or that of some other Western State, and New York State has thus been their residence only for brief feeding and educational purposes.

Of late years, Canada and Vermont, formerly the nurseries of many of our very best equines, have fallen completely into the shade; we see but few from those sections—in fact, Canada, from its easy and inexpensive access to European markets, depends almost entirely on the foreign trade, and sends there chiefly general purpose and draft animals. Maine can still afford us a few, but those of strictly high class are far between.

The exportation some twenty-odd years since of two or three car-loads of so-called Morgan stallions from Vermont to Michigan, greatly helped the horse interests of that State, and nearly all the close-made, round-turned, snappy, well-finished cobs and coachers we get from that locality possess more or less Morgan blood.

We are getting a few good harness horses from near-by States—Pennsylvania and Virginia—but only a very few, hardly enough to be considered.

So great is the difficulty in finding good material that wholesalers located in the

West will send their buyers—of which they maintain an expensive corps—hundreds of miles to look at a "good prospect"; but it comes up to the description about once in twenty times. The retailers of all the large cities have no definite hunting-ground, but pick up their offerings one by one as they chance upon, or hear of, them, often at widely separated points. In fact, not a few of them are this year buying three- and four-year-olds, or even youngsters of lesser age, and laying them aside to feed, and educate when they grow to marketable maturity.

In view of this shortage and of the tremendous existing demand, and of the depletion of the country of desirable pro-

ducing material, the hackney, the French trotter and coach horse, and the Orloff, have the opportunity of their lives for obtaining recognition of their undoubted merits, and liberal reward for their promoters and importers.

The cry throughout the country is for desirable stallions at reasonable service fees, and good specimens of these breeds can do excellent and profitable service almost anywhere throughout the Western country. We need a heavier horse, a thicker horse, *i. e.*, tall, but long, low, short-legged and powerful; a horse that goes true and straight all round, and neither "dishes" in front or goes wide behind (fatal defects for foreign markets); a good-fronted, flat and large-boned, bold-looking animal of fair pace—eight or ten miles the hour—and weighing from 1,000 pounds upward. Such animals, the sires of the families named, can (and will shortly) produce in quantities, with approximate certainty; and for them all the native and foreign markets are clamoring. It may be said here that, considering number and opportunities, the Russian trotting-bred coach horse has done as well and proved more consistently good as a producer than any other variety as yet imported, for which results a perusal of his pedigree would prepare one.

It seems odd that the very plenitude of the right sort should have resulted in the

comparative extermination of nearly everything desirable, but it is true that such has been the result. The country was full of wonderfully good specimens only a few years ago, and they were put upon the markets at prices so ridiculously disproportionate to their real worth that buyers from other countries flocked here to purchase; buying everything at prices which, while seemingly too high for our competition, yet proved absurdly below true values.

When nearly all suitable material had thus been absorbed, the bicycle boom, and other apprehensions, kept prices so low that stallions of great value (if available to-day) were put upon the markets by thousands as stags, and from their more robust personality found more eager buy-

and (possibly) to disguise defects in conformation; thorough training and biting; rebalancing and reforming action, and developing latent powers in that line, and finally proper marketing and capable selling.

As to training, the best, truest and highest action, wherein shoulder, knee, stifle and hock all play their proper part, is possible only to the horse possessed of fair natural speed. The most brilliant results are obtained from restrained speed, *i. e.*, when the animal cannot go on, he must and does go up, especially when his poise has been changed by sharp biting, high checking, and proper shoeing. Putting heavy weights—eight or ten pounds—round the coronets of certain horses, and leaving them on for an hour or so in



Photo by Schreiber.

Galloway's Silvertown and McKusick, Owned by Mr. G. Hutchinson.

ers than the geldings, and the mares which were shortly also sacrificed. The result is we are facing a horse famine of first-class material, the like of which we have never before experienced.

The first and pressing necessity, in order that the legitimate wants of the near future may be met, is attention to breeding—get the right stock. Then comes the feeding to develop harmony of outline,

the box stall, and then taking the weights off and driving them in harness, will for a while produce extraordinary action. This, however, applies to what the trade call "bulls"—cold-blooded animals of low intelligence. Your high-stepper must always feel away above himself, must always be "nagged," *i. e.*, driven up to his bit; and paraded for brief and infrequent intervals; must be pulled together and

driven every moment; frequently made to back—which greatly helps proper balance—and left checked high half an hour or so after using, or put in the biting harness once or twice a day for short periods.

Every horse is different in his requirements, and as much skill is needed to balance him for high-stepping as for fast trotting. Artificial appliances of all kinds have been tried, and are of varying degrees of merit. Exercise on a long rein in the clay pit (where heavy going makes a horse pull hocks and knees), or deep

tired; must never be allowed to go carelessly, but kept always and for brief periods on parade, and must always be feeling above himself.

His biting and the position of the bit must be just what suits him best, which only trial will show; and his preference for two or four wheels must be consulted.

One highly successful dealer in England keeps his horses in pitch-dark box stalls, whence they are led forth for inspection into a bright, sunny yard, the wall of which is dazzling white, as is also the gravel under foot. The wall is loose,



Photo by Schreiber.

Champion Red Cloud.

snow are both of use; the hair rope of the French dealer (of the size of a lead-pencil, and going through the mouth, through check loops, down back and under tail) works wonders in some horses in making them get their hocks under them, and in improving their balance. Sudden changes of weights have often great effect; but the gist of the whole matter is that the animal must never be

corrugated sheet-iron in a long strip, and when a horse is run in hand for a customer, a stick rattled on this causes the reverberations to go with, and apparently beside him; the ensuing action is of the most extraordinary and brilliant character, but, of course, hardly likely to endure in harness, although excellent to sell on.

The extravagant action which is pro-

duced by the various artificial methods employed can never endure; and as the buying world progresses in knowledge and experience, and as our horse-show judges recognize by their verdict and approval, the natural, easy, well-balanced movement of the harmoniously developed animal, so will the present demand for equine hysterics disappear, and the whole tone of the market change.

If horsemanship were but a marketable commodity, and one could but endow the purchaser and private owner with that native intuition which has been so well defined as "knowing what to do and what to let alone," the great difficulty attending satisfactory usage of horses would be done away with. After all is said and done, everything depends upon the man behind the horse; his knowledge, his sympathetic instincts and his nerve.

In view of the enormous and increasing difficulty of obtaining high-class horses for any purpose—a condition of affairs which must obtain for several years to come, owing to the hiatus caused by the almost universal abandonment of breeding—it is inevitable that the consumer must make up his mind to one of two things: either to accept fair-class horses that are not quite sound, or put up with a sound horse of slight individual merits.

Strictly sound high-class horses are almost impossible to find, despite most diligent search, and in no country are buyers' exactions upon the point of absolute soundness so severe as they are in America; and nowhere are they so unreasonably and unwisely strict. Unreasonably, because perfection is insisted upon when certain departures from it do not affect usefulness, and unwisely, because the presence of these (often trifling) defects frequently results in the "turning down" of an animal otherwise exactly suited to the requirements of the buyer, and the purposes for which it is to be used. To the average purchaser absolute soundness is a "bugaboo" upon which he, parrot-like, insists, knowing no good reason for his persistence, and yet fearing to invest in anything to which the appellation "sound" may not apply. Of course, the majority of buyers are unable to decide for themselves as to what defects are really injurious, or likely to become so; or, in fact, even to determine whether such blemishes really exist at all.

In this emergency the veterinarian is very properly called in, and the matter blindly left to his verdict, which is capable so far as concerns physical merit, but generally weak when it includes an expression of opinion as to whether the animal is suitable for the purpose intended.

Cold-blooded Dame Fashion has decreed that we shall mutilate most of our dumb animals in various ways, and the horse has not escaped. In a climate where heat endures for long periods, where flies and insects in myriads are with us most of the time, we cut off his tail, we pull his mane (another natural fly-brush); we bear his head up at a distorted angle; we cover his eyes with heavy, close blinkers, and caparison him with harness too often needlessly heavy and cumbersome.

Within the limits of a magazine article it is impossible to go more closely into the details attendant upon the development of the raw article into the finished market offering. Lacking optical demonstration, verbal description of different methods and management is both tiresome and confusing; and one is in doubt, unless one starts in at the very beginning, just where to commence, and just what to leave out.

The practical points of the procuring, education, management and driving of all classes of harness and coach horses; the schooling and handling of hunters; the training of saddle horses; the correction of vice and faults in all horses, by American methods and along modern lines, should prove interesting and instructive reading. Too long and in too many ways we have followed the iron-clad rules of traditions which never had good ground for existence; or, if they had, were, totally unsuited to a climate such as ours, the usage of to-day and to modern methods and modern needs. In case after case common sense and ordinary intelligence suggest and put in use processes as new as they are thoroughly practical, beneficial and original, and it would be a privilege, indeed, to lay all this material before the sporting world; to try to help in the understanding, management and protection of the truest, most useful and most humble friend of man; and to possibly assist in bringing nearer and more understandingly together the sportsman and that noblest of all animals—the horse.

THE CONFESSIONS OF AN ANCIENT POACHER

By Maurice Thompson

They all averred I had killed the bird
That caused the corn to grow!—*Coleridge et. al.*

THIS is a bad age, an age of selfishness and sin, from the standpoint of a man who likes frequently to take an afternoon, or, once in a while, even a whole day, in the country, when the shooting season opens. Every field and woodland is "posted"; that is, the sportsman has a warning against trespass flaunted before his eyes at every turn. "No hunting," "No shooting," "No fishing," "No trespassing"; these and like legends bedeck the trees and fence-posts, to the bewilderment of certain good men who formerly could roam at will in the fascinating rural closes and make a merry din of guns while pursuing the quail, the "prairie-hen" and the cotton-tailed hare. I detested the doctrines of Henry George until one day a six-foot farmer, with a gun which looked eleven feet nine inches long, chased me out of his boggy premises, whereon I had discovered some woodcock.

"I owns this yer farm," he bawled, "an' I'll jest everlastin'ly shoot the clothes clean off'n any dad ding town scallowag 'at I ketch a-trompin' 'round on it. Git, an' git quick! Ye can't do nothin' on this yer land 'ceptin' ye do it a runnin'!"

If I could have fixed a single tax of nine hundred per cent. on that land, what industry I would have displayed in making the levy! I presume the law is on his side. The law generally is on the side of the man with the long gun and the miles of unkempt farm-lands. But what a paradise those same lands be for you and me!

Obediently I acted upon the stalwart landlord's order. When he said "git," I got. He followed me across wood and field to the highway, spilling upon me meanwhile the concentrated essence of revilement.

"Creepin' aroun' over my primises, air ye, with a bow 'n' arrers, dad ding yer onery liver! Tryin' to shoot somethin' fer yer starvin' wife an' thievin' children, hay? Well, I'll blow ye in two, right at the small o' yer back, an' feed yer to my hogs, dad ding ye!"

I scrambled over the fence into the road and took a deep breath. Since that day I have been a poacher. And I beg to tell you that poaching has delights beyond any record in the Koran! Dangers attend it at every step; but what charming dangers they are! To slip back the very next Saturday and kill those woodcock, while the farmer with the long gun was doing his weekly business in town, was inevitable. I even sauntered down to his house, and while his good wife gave me a cup of cool buttermilk I showed her my bag of birds and told her just where I killed them, knowing that she would detail the whole story to her truculent lord.

With diligent practice the poaching theory becomes inexpressibly fascinating. It has so many rays of possibility with which to light up the sportsman's chances for a few furtive shots on a forbidden ground here or yonder in the wide domain of Nature. The spirit of Nimrod dies hard under the iron rule of *quare clausum fregit*. We of the free-hearted and strong-handed shooters' guild feel that we have rights that even landlords should respect.

Poaching, however, is a universal practice. I have seen farmers poaching, in absolute defiance of law, on their own lands. Indeed, the farmers kill more game unlawfully in one season than do sportsmen in ten seasons. They drive everybody off their premises and then set traps for the quails, springes for the woodcocks and deadfalls for the hares. They "post" the streams to prevent angling, while they use seines and dynamite.

But I have no quarrel with any poacher in the world. Like love, the poaching of which I write is an activity in which everything is fair. If one landlord chases you off his estate, you will be so good as to enter forthwith upon the estate of another. Never despair.

There was a time, however, when I began to feel blue. The walks were too long and my time was too precious. Moreover, a horse and vehicle were not

available; they could not be hidden, hitch them where I might, even to a star, and when, after an hour or two of sport, I returned to them with my bag, there stood Bucolicus ready to nab me!

All in vain was my utmost cleverness; the horse and cart always betrayed me. Just fancy my revery once upon a day when, with four bobwhites, a hare and three grouse, I returned to find the hump-shouldered and hirsute owner of the soil over which I had been shooting quietly settled in my vehicle, smoking his pipe and waiting to apprehend me for trespass!

But the advent of the bicycle spared me future humiliation, and there will be no difficulty in understanding how the wheel and the bow have mixed their gifts of delight into a new experience for me.

The poacher finds the wheel and the bow just suited to his needs; both of them as noiseless as death. The farmer who has erected the sign, "No shuten' aloud on this farm," can not understand the humor of his bad spelling when set before the archer, who inwardly retorts: "Of course not; I'll shoot neither allowed nor aloud on this farm. Permission superfluous when the shooter is silent." Rubber tires and by-roads bear me into forbidden places. "No trespass-sion heare," says a gray board nailed slantwise on a tree deep in an ideal wood for bow shooting—a wood where dovesquabs, just old enough to fly well, twinkle on drab wings from bough to bough. "Keep out," remarks another bit of plank scarred with red letters; but I keep not out.

The free-born and lordly American who owns this vast, tangled wood, is a jolly fellow in every respect but one. He will make any sacrifice for his brother man save letting him shoot on the estate aforesaid. Mention that, and his whole nature sours instantly.

"No, you don't!" he storms. "Narry a step do ye take on this yere land with them there weepsons in yer hands. No use to talk. Yes, I'm yer friend, but däng a friend 'at wants to shoot on my farm!"

And I turn from him and trundle away on my wheel.

"Gee erp, there!" he says to his sturdy team, and resumes his fragrant toil.

He wags his head and takes it for granted that I have gone back, sad-heart-

ed and disappointed, to town. But I haven't. I have, instead, sneaked around to the farther side of his domain by way of a shady loke and have entered.

It is a great joke on the farmer over yonder; he hears no gun; no road-cart has clattered along the lane; there surely can be no poacher in the wood to-day. Yet here am I, busy at my fun, knocking the squabs from breakfast to business, filling my bag and grinning like the faun of Praxitiles. Trudge along, O ploughman, dreaming your sordid dream of granaries and greenbacks, while I have the reality of a shooter's paradise for two long hours!

Yonder is my wheel, hidden in the thicket close to the worm fence. My books and luncheon hang high above it in the foliage. I sneak from shadow to shadow, from tree-hole to tree-hole, feeling keen relish what time the sense of furtive triumph over a law against freedom spreads through me.

The legend, "No shuten' or feeshin' on these premisses," with its idyllic suggestion of broad dialect, always presents, to me at least, infinite temptation of a general nature; but there are special cases. Where the features of the countryside take on a leer, as if to say, "See how unkempt, how broken, how coppice-covered, how shaded by primitive woods I am!" then I take umbrage and climb over the fence, law or no law. I have always desired to be like Shakespeare. The nearest that I have ever approached his pattern, and there I may have even gotten the better of him, has been in the matter of poaching.

Over the fence—usually it is of barbed wire, eight strands—over the fence I hoist my wheel; then I take off my shooting-coat and hang it upon the wire teeth to protect my legs while I scale the barrier. "No shuten'," indeed! My dear sir, plenty of it, and to spare!

The poacher has his peculiarities of vision and hearing. Every hair on his wise head is a capillary eye, every pore of his skin is auditory. He is wary, quick, hard to catch, and slippery in the hand. His temper is admirable and his humor inexhaustible. What he wants he gets, and what he gets is wild game, things *fera nature*, from time immemorial the property of him who takes them. And so here am I, ready for adventure.

I peep between the trees of the wood that I have invaded and look upon a rural scene of memorable beauty. A rolling green pasture between me and the farmer's house is dotted with fat cattle that nip the grass and whisk the flies. Leftward, a little farther off, lies a field newly ploughed, harrowed, rolled and drilled to wheat, level as a floor, smooth as a jack-planed board. In that direction I hear quails piping.

My mouth waters while I think of the dear old days when a quail pot-pie was served to me twice a week throughout the season, or the birds were broiled, deluged with nutty butter and garnished with cress. That was in the golden age. So long as plenty of feeding ground and proper covert remained, no amount of shooting affected the annual number of birds. It is agriculture that has destroyed game, not the shooters. The tile drain kills more snipe, woodcock and wood-duck than all the guns. The closely shaven fields freeze more quail and grouse than we sportsmen could ever bag.

Time was when I could tramp the country openly in pursuit of the common property of all men. Now, however, "No shuten' aloud" has destroyed my immemorial privilege, and I am compelled to poach. Amen.

Mine enemy, the grizzled farmer, has a fowling-piece and a huge dog with which he is supposed to guard his holdings and make good the prohibitory legend on his trees. If he should see me there would be tragedy. I know the danger and joyously realize it; that is the sauce of my adventure. I plan about the bevy, having located it at a far corner of the field, where the briery head of a ravine invades the ploughed land.

Five minutes give me ample time to map out my campaign. I am to reach yonder hedge as best I can, thence I shall follow its line, keeping under cover of it to prevent any person seeing me from the house. At a certain point I shall have to take boldly to the open and cross the field's corner. There is the main danger. I had the feeling of going upon a scouting excursion in a danger-haunted region. Remotely, besides, there hovered in my mind a strangely invigorating consciousness of iniquity. Every step that I took reacted upon my imagination and stirred up dregs of predatory instinct.

In the use of the bow I have probably reverted to the aboriginal type. At all events, with it in my hand and my full quiver at my side, I retreat a thousand years into the past. My whole being enters into the desire to forestall mine enemy, the man who posts his farm!

The quail had ceased calling, wherefore I knew that they had come together at the edge of the ravine. Stooping, skulking, creeping from cover to cover, I hurried on my devious way, all the time ready for a surprise and a breakneck run back to my wheel. If the farmer, his wife, his army of burly sons and his dogs would but hold off a while, only till I could skilfully drive the quails into the wood, then what a bit of sport I might have. Cool as the October air was, I felt a perspiration creeping down my spine as I hastened along.

At last there was but the bit of open field to be traversed. I did not falter here, but took on a great spurt of courage. When half-way over I saw the birds, as many as fifteen plump youngsters, loitering beside a fringe of blackberry briers. I stopped short, in full view from the farm-house, and let go an arrow that knocked over one bird right in the bevy's midst. I had expected at least three times that luck; but was well pleased as it had befallen, seeing the whole group scamper into the ravine afoot, instead of flying.

I bagged my bird and hurried on, never forgetting my danger—that would have been to lose the zest of emprise—never ceasing to keep the tail of an eye upon every avenue of approach. I followed the quails by sight, not hurrying them or doing anything to frighten them. Indeed, I coddled them diplomatically for the sake of a shot now and then. The ravine was a cool, sweet place, where a few belated rose gerardias shone pink in the shade. Tufts of goldenrod waved their plumes aslant in protected spots, where wisps of bluegrass stood knee-high under blackberry vines. A rich odor of autumn, the bouquet of maturity, lingered everywhere, and the brook's voice filled the weather, as juice fills the grape. On high in the tree-tops a discord of woodpecker jargon and a rasping of bluejay voices added something excellent to the general effect of things, while I stole along and tried another shot, which, deflected by some slight obstacle, went wide.

Suffice it on this score to say that I had an hour's hard shooting and bagged, all together, five birds. Then followed a rest beside the little stream deep in a papaw thicket where the wild fruit was at the point of falling, the green-brown clusters glowing dimly amid the foliage and causing the boughs to sag low with their weight of almost over-fragrant ripeness.

At some point during this luxurious half-hour of bliss I heard a noise that called me from reverie to attention. Then a powerful man, grizzled and wrinkled, yet of fresh complexion, and carrying a heavy plough-stock on his shoulder, trudged close past me. I could have touched him with my bow, almost, while I shrank deeper into the thicket, holding my breath. He was the landlord whose close I had broken, whose birds I had killed. Not a glimpse of me did he get, however; and when he was quite gone I gave way to hysterical chuckling to think that I had been lying so close beside a path all this time and serenely fancying myself hidden in a very remote place!

I got to my feet and listened for a bird cry. Far up the stream a flicker let go his merry laugh. Over in the clover field behind the wood some meadow-larks piped faintly through the hazy sunshine. Not a live thing seemed to be near me; so I walked gingerly along the path in the direction taken by the farmer, my nerve-centers uncomfortably full of that nameless sensation which succeeds guilt and precedes fear. In fact, every little sudden noise startled me. I actually found myself going a-tiptoe, the goose-flesh playing on my back.

It was no short walk back to my wheel, for I dared not go boldly by the most direct route, and I discovered that the return had little fascination and expectation to urge my feet withal. The farmer's son (there were two or three others) was calling up the pigs near a barn; he had a roaring barytone voice with a virile threat in its timbre. I could have seen him by craning my neck to look over a *bois d'arc* hedge, which I did not do.

And yet every breath was a draft of exquisite pleasure; every step seemed to send a joyous reverberation along the strings of my heart. Blow your haunting flute notes, O pastoral meadow-larks! I feel your mood imbue me as with a dye of heavenly color while I hurry along,

half expecting some sudden and terrible surprise.

Blowing and tired I reached my hidden wheel in safety and lifted it over the fence into the lane, where I quickly joined it. How thirsty I was! And then came a vision of the spring bubbling down yonder by the farm-house; but not for worlds could the thought of bearding the farmer in his dooryard prevail upon me—not for fortune and the headiest draught of fame could I be induced to venture a bow-shot nearer yon lusty and vociferous swine-herd.

With hasty hands my bow was carefully padded and strapped to its place, my quiver tied upon the handle-bar, where a hawk I had potted also dangled; and then I mounted, only to recollect that my bird-bag, with the quails in it, had been left on the other side of the barbed-wire fence where I had cast it aside when I took off my coat to spread it over the spikes. So I had to return and climb that fence twice more. Then one of the farmer's boys espied me. Yes, he beheld me making ready to escape. He comprehended everything.

May I never again hear a yell like that—a monstrous, rasping volley of words, pumped out of brazen-toned lungs—whereat I shivered all over.

"Git out! Git out! you blamed thief, or I'll shoot ye in a minute!"

Then he whistled for the dogs and called his father. I heard various sounds of alarm, a great stir, a jangle of rustic exclamatory phrases, while it seemed to me that I should never get my coat on and my bird-bag adjusted. Four separate times I failed when I tried to mount my wheel, and when at the fifth trial I landed in the saddle, I heard the household back there swarming, or rather charging, like heavy infantry, into the lane. The racket seemed to imbue space with a multitudinous sense of danger.

My legs came near failing me, so shocked with sudden alarm was I; nor could I more than save my wheel from bolting into a deep ditch beside the road; still, I somehow kept my head, and (you may believe it or not) I was laughing all the time. The beating of heavy brogans in the road told me that the farmers were already hard after me, and their voices had fallen to guttural growling of atrocious import.

Those men were close enough to me, before I got under full speed, to bounce some loudly whizzing boulders along the way, dangerously close to my legs. I bent low, I pedaled furiously, the tires purred in the sandy dust. My chin urged the handle-bar. The feathers of the hawk tickled my nose.

"Stop thar! Hold on! Stop, or I'll break yer back!" they yelled. "Stop thar!"

It was in vain to use that turn with me. Their missiles began to fall short when I fairly got down to the work of riding, and gradually their hoarse cries softened in the rearward distance. The wings of my dangling hawk quivered and rustled in the breeze of my flight, and the arrows clattered in the quiver as I drove right over some of the biggest stones in the highway.

By this time the sun was wrapping himself in a cocoon of more than silken glory just above the hazy horizon. The fence-posts whisked rearward in a dancing line; the hedges with their early autumn tints looked like fast flowing streams of opalescent fluid. Presently I became aware that my pursuers were hopelessly distanced; then I slackened my pace and mopped my face, still chuckling, filled with an exhilarating sense of triumph.

Slowly pedaling on a smooth, firm highway leading straight into the face of the sun, the cool breeze palpitating around me, I meditated upon the afternoon's delights. I counted over every shot, whether hit or miss, heard again every note of my bow-cord and every arrow-stroke amid the briers and against the gnarled roots where the quails had tried to conceal themselves. I do not know how to communicate to others the delicious feeling which is subtly induced by a trespass. I know just how Adam's blood tingled when the forbidden fruit melted fragrantly down his gullet. I have the liveliest realization of Shakespeare's joy when he got off with a deer or a brace of pheasants. Even the reckless roguery of dark little Villon, clambering by nighttime out of a church window with a pair of silver candlesticks under his arm, is not strange to my psychological centers. You will smile when I add that my fancy

skipped gaily back to Arcadia and sympathized liberally with the young rascals who, according to Theocritus in the Anthology, sneaked close up to Pan's cavern, and, hiding behind a tree, made such a racket that the weary god was deprived of his siesta.

In the invigorating chill of twilight I reached home, thirsty, hungry, tired, elated; and that night I slept the deep, dreamless sleep of the poacher who feels his duty well done. Next morning there appeared for breakfast broiled quails on toast, which reminded me that the farmer and his burly sons probably had to content themselves with fried bacon. Truly may it be said that the way of the transgressor is soft, his adventures wholesome, his dishes very savory and his digestion excellent.

And now work has a freshness in its countenance. I go to my desk with a sense of rich gain to my imagination. The ink in my pen looks gay and exhales a rare fragrance like that I have sometimes faintly caught from a seawaft off a distant blooming shore. Every drop of my blood is a separate sphere of ruby-red delight.

"No shuten' aloud."

Oh, to be sure not, my dear farmer friend. A great aromatic contentment steeps my soul, as a peach, red, ripe and luscious, is steeped by the happy Kentuckian in a jar of brandy.

"Keep outen these primises."

Of course. Of course.

"No trespassun upon this land."

Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, I inwardly count the days. Yes, next Saturday I shall be again out for an afternoon's adventures. I know another vast, half-cultivated domain whereon I can hope to get a few furtive shots at a great risk. The farmer is a crusty, gloomy and miserly old bachelor with a bank full of money and three sections of land as unkempt as himself. And at stated intervals all over his estate is posted the information to all to whom it may concern: "Enny man Kotch on this farm will get the law poot to him warm."

That I consider a cordial invitation. Accepted.

GAME-BIRD SHOOTING IN SOUTH AFRICA

By H. A. Bryden

AUTHOR OF "GUN AND CAMERA IN SOUTHERN AFRICA," ETC.

ALL over South Africa, from the Zambesi River to the Cape Peninsula, an extraordinary abundance of feathered game is to be found by the man with the shotgun. Wander where you will, over the rolling plains, along the river side, by vlei and waterpan, among bush and forest, upon rugged hill slopes or amid sequestered vales and deep ravines, there you will always find some kind of feathered game well worthy of pursuit.

If you trek by wagon, far up country, beyond the few railway lines, you may be thankful indeed that in the francolin and bustard, guinea-fowl, sand grouse and wild duck, nature has afforded so rich a store of wild life, for as the big Kaffir pot simmers over the pleasant evening campfire the results of your work with the shotgun add not a little to the zest of the hard-won supper which is to follow a long and tiring day of travel.

As in England, partridge shooting is perhaps the most general and the most popular form of sport with feathered game in South Africa. The South African partridge is not exactly the partridge of Europe, but it is a near cousin of that species. It is, in truth, a francolin, which is the partridge of Africa, and may be called the cousin-german of the gray partridge of Britain. Francolins are a numerous family in Africa, numbering, south of the Zambesi alone, some eleven or twelve species. Of these the most fa-

miliar sporting birds are the redwing and graywing partridges (*francolinus levailanti* and *francolinus afer*), the Orange River francolin (*francolinus gariepensis*), usually termed "redwing"; also, the lovely coqui francolin (*francolinus subtorquatus*), a smaller species found north

of the Vaal River and in Natal; the red-billed francolin (*francolinus adspersus*), often known as the silver partridge, found from middle Bechuanaland northward, and the pileated francolin (*francolinus pileatus*), another northern species, occurring from Bechuanaland to the Zambesi and westward throughout Damaraland. Then come the so-called pheasants of the colonists. These are also francolins, but differing from the preceding species by their more bush-loving habits, their running ways, their dislike to be forced into flight, and especially by their peculiarity of roosting at



White-Quilled Black Moorhens.

night in trees or bushes. The partridges, on the contrary, roost always upon the ground.

The best known among the pheasants are the noisy francolin (*francolinus clamator*), the common pheasant of Cape Colony, the Cape red-necked francolin (*pternistes nudicollis*), found in Cape Colony and Natal, and Swainson's francolin (*pternistes swainsoni*), whose habitat lies from British Bechuanaland and the adjacent Transvaal regions northwards. A peculiarity of these two last-



SHOOTING ORANGE RIVER FRANCOLIN. MANTOANI RIVER, BRITISH BECHUANALAND.

Waldwell 1900

named pheasants is that they have naked throats and chins, quite void of feathering—in hue of a dark, purplish red.

Among these partridges and pheasants of South Africa, undoubtedly the finest sport is afforded by the redwing and graywing, the Orange River francolin, and the Coqui francolin. The redwing of Cape Colony is found beyond the Orange River, but is most abundant in the old col^ley proper; that is, south of the Orange River. Its favorite haunts lie by choice in quiet and secluded mountain valleys, usually where a pleasant stream is to be met with meandering through swampy ground among palmiet, coarse grass and reeds. Like all the francolins of Africa, these splendid game birds lie very close, and a good, stanch pointer or setter, or an old, knowing, poking retriever or steady spaniel is necessary to locate them.

In fact, it may be accepted as an axiom that without a good shooting dog, sport with game birds is not worth attempting. Covert is extremely plentiful; even upon the open grass plains, birds will be found to stick to shelter with great tenacity, and a man without some sort of shooting dog will find himself enormously—nay, impossibly—handicapped.

Pointers are by far the most preferable of all sporting dogs for South African work. Their short coats are greatly in their favor, and they stand the hot sun and dry ground fairly well. Retrievers, setters and spaniels are greatly impeded by their long coats, which every thornbush and burr, in which the veldt so greatly abounds, takes advantage of, and they naturally suffer from heat even more than the smooth-haired pointer. A colonial-bred dog is, of course, greatly preferable to an imported dog; in fact, until after a generation or two of acclimatization, pointers and setters are of little use.

The Cape redwing is not always to be found confined to mountain valleys, although for choice these are, I think, its favorite places. It ranges in fair-sized coveys, from six to ten birds, over the more exposed slopes, and even upon open flats, and, taken all round, affords the best partridge shooting in Cape Colony.

The Cape redwing is considerably larger and heavier than the English partridge; it measures thirteen inches in length and is of a dark, partridge color,

with very handsome markings. The inside of the wings are reddish, from whence the bird derives its colonial name.

The graywing partridge is slightly less in size than the redwing, and of a lighter coloring, resembling an English bird more in appearance. It is a mountain-loving game bird, found chiefly in Cape Colony, Natal, the Orange Territory and Transvaal. It runs usually in good-sized coveys of from eight to ten or twelve, lies well to the dog, and affords capital, if somewhat difficult shooting. Difficult, that is to say, after the covey is broken up.

Often found in an open valley or upon a sloping foothill, the remnants of the graywing covey, when once flushed, scatter and betake themselves to the most difficult parts of the mountain, and even to a good climber and well-conditioned pedestrian they afford a very tough bit of shooting. Still, especially among the wild and romantic mountain interiors of Cape Colony, sport with these excellent game birds has an extraordinary fascination, and a bag of eight or ten brace brings with it the consciousness of labor more than well spent and a dinner truly earned by the sweat of one's brow.

The Orange River francolin, also generally called redwing partridge by South African sportsmen, is a magnificent game bird, bearing a strong family likeness to its congener of Cape Colony. The Orange River francolin is, however, brighter in coloring and somewhat larger than the Cape redwing. North of the Orange it is undoubtedly the most popular sporting bird in South Africa, and offers quite the nearest approach to the old English style of shooting.

Living in huts on the Maritsani and Setlagoli Rivers, no great way from Mafeking, some few years since, we usually sallied forth on our shooting ponies, rode down to the riverside—nominally dry except for a pool of water here and there in its sandy bed—and were soon upon favorable ground for these birds. Ordinarily we had a couple of pointers with us, and as soon as one of them stood to game we abandoned our ponies to a native boy who followed leisurely in our rear, and began our sport.

At early morning and evening these francolins were usually to be found about the slopes of low, grassy hills bordering

the river, while as the day grew hotter they betook themselves to more shady retreats among the low bush bordering the river course itself. The birds lay very close in this covert, between ten and three o'clock, and we usually had excellent sport, breaking up a covey, securing a brace or two in the process, and following the survivors to their next resting places. These birds are occasionally great runners and thereby often escape. Again, in the intense heat of mid-day, scent often seemed to fail, the dogs grew slack and tired; and the birds, once shot at, lying with marvelous closeness, would allow us to walk right past them.

Halting for lunch beneath a friendly bush overhanging the sandy stream bed, and getting, if possible, a drink of water for the pointers, we presently resumed our march, still picking up a bird or two as we moved down the river. Swinging away toward three o'clock, we usually pursued koorhaan (bustard) for an hour or two in more open grass veldt, and then, mounting our ponies, rode for camp again. Nearing camp, we usually found

took of a refreshing *soupe* of pontacq—Cape red wine—before the evening meal.

From ten to twelve brace of Orange River francolins, seven brace of koorhaan (black and white bustard), two or three hares and a leash of dikkop (thick-knee plover), would be about the extent of an average bag secured by two or three of us after such a day. Compared with a big English partridge drive on a highly preserved estate, or a fashionable pheasant shoot, these figures are modest enough; yet we had always the satisfaction of feeling that our sport was thoroughly and essentially wild, that we were not shooting hand-reared birds, that we were not marshaled and managed by keepers like a parcel of schoolboys, and that, to our own exertions and veldt-lore, and the wonderful instinct of our trusty pointers, were the results of our day's sport entirely due.

The lovely little coqui francolin, the smallest of all the African partridges, is a perfect gem among its fellows. Instead of averaging from twelve to fourteen inches in length, it measures but ten inches; the coloring of the back is partridge-like, but the creamy breast and stomach are barred with dark brown, much like a hawk's marking; the neck, eyebrows and ear coverts are brilliant orange, the head is chestnut brown, while the strongly spurred legs are deep yellow in color. The female shows black, chain-like markings, which form a gorget upon the throat.

These lovely game birds are, as I have said, found chiefly north of the Setlagoli River (British Bechuanaland), and in Natal. Westward they extend through Ngamiland and Ovampoland. They love grassy plains, interspersed with bush and low forest, and are found often in as large coveys as from ten to twelve and even fourteen. No bird of the South African interior affords prettier shooting than the little *Nswimpi*, as the natives call it, and many a day, in traversing the wilder parts of the veldt, where we had no time to pursue heavy game, have we been indebted to this plump little francolin for a dainty supper.

While the wagons trekked on for the day, we usually spread out on horseback, with the pointers ranging in front. So soon as a dog stood, two of us would dismount and approach the game. Some-



The Stanley Bustard.

the redwings calling to one another, toward sundown, on the gentle slopes above the river, and secured a brace or two further, before counting out the game bag. After such a day's excursion we usually reckoned up the score as our ponies were off-saddled, while we par-

times a steinbuck would rise from its form and bound through the grass, to be stopped, perchance, by the left choke barrel and a charge of No. 2 shot. Sometimes a koorhaan would be the victim, or perchance a covey of Orange River francolin or of guineafowl would afford us twenty minutes' sport. But, more often than not, in the open grass veldt of Bechuanaland and Ngamiland, it would be a covey of coqui francolin, from which, before we had done with them, we might take three brace or more. The birds, like most of the francolins, seldom flush together, as do partridges in Europe, but, with care, will get up one after another, affording very pretty and typical sport.

The flesh of these dainty game birds is white, tender and excellent; to my mind quite the best of all the African francolins. All African game birds, by the way, suffer by comparison with European birds; they are, naturally, dried in flesh and less well tasted, except perhaps the young guineafowl, which is truly a delicious bird. Still, a brace or two of coqui francolin, roasted in a Kaffir pot, and basted with bacon fat, is very excellent eating. A stew of guineafowl, francolin and the breasts and wings of bustard (black and white koorhaan or bush koorhaan), with onions and potatoes, a tinge of Worcester sauce, a little flour and a glass or two of pontacq wine, added in the last ten minutes, offers to the tired and sharp-set veldt man a banquet fit for the gods—a banquet the fragrance of which will linger in his memory to the latest days of his existence.

The so-called pheasants of the colonists are not by any means such good sporting birds as the non-roosting francolins. Their thicket-loving habits and their lurking, running predilections render it exceedingly difficult, even with a good sporting dog, to get them upon the wing. Perhaps the most satisfactory of them is Swainson's francolin, sometimes called the brown, red-necked francolin, with which I have occasionally had fair sport in portions of Bechuanaland. In the thorn bush along parts of the Setlagoli River, a little southwest of Mafeking, we used to succeed, by dint of careful working and a busy dog or two, in getting these big francolins well upon the wing. Once in the air, especially if a decent breeze is blow-

ing, these birds go at a great pace and afford pretty shooting. They are not by any means so plentiful as some of the other francolins, and get up, as a rule, one at a time.

A very common game bird along the rivers and lagoons far up country, especially towards Lake Ngami, is the red-billed francolin, or silver partridge, which, however, of all its kind is the most difficult to put upon the wing. If you want to bag these birds you are usually compelled to shoot them running or perched upon trees. They absolutely decline to take any prolonged flight, and in my experience prefer to trust themselves to any bush, or squat motionless upon the branch of a tree, where, from their sober, protective coloring, they often evade the eye of the sportsman, rather than take the wing. If you want a dinner, therefore, you must follow the custom of the country and bag them as best you can.

The common wild guineafowl of South Africa is the Cape guineafowl (*numida mitrata*), a splendid bird, bigger and darker in plumage and heavier in weight than the semi-domesticated guineafowl. This grand bird, which measures from sixteen to seventeen inches in length, is still fairly common in the more jungly portions of the eastern part of Cape Colony, and north of the Orange River—especially in Bechuanaland, Ngamiland the Northern Transvaal, and Rhodesia—and is often extremely abundant, wherever bush and water are to be found. Along the Zambesi River a beautiful species known as Purcheran's guineafowl is very plentiful.

In the dry season they may be found near permanent waters in great troops, and I have seen bands numbering between two and three hundred. Occasionally they may be chanced upon in fairly open veldt, and then, with a good dog that understands his business, excellent shooting may be obtained. The dog, finding this game in front of him, runs in upon them and stands; the birds become cowed and squat, and the gunners, hastening up, bag bird after bird as they get up. Too often, however, these ambulatory game birds run like hares. In this case a knowing old pointer who understands them will chase them hard till they tree, the gunners hear his baying, and presently arriving upon the scene, pick off the great

birds as they quit the tree for some other shelter.

Bustards are, of course, very strongly represented in Africa, and really excellent sport is obtained with them. South of the Zambesi, some eleven or twelve notable species are found. Of these the splendid paauw* or Kori bustard (*otis kori*), the finest bustard in the world, stands easily first. The paauw, which has a general resemblance to the great bustard of Europe and North Africa, measures as much as four feet eight inches in length, and attains a weight of from twenty to thirty pounds, but specimens are occasion-

will squat, and the gunner, running in quietly and using buck or swan shot, may secure it as it gets up, even with the scatter gun.

The paauw is migratory and is found, more commonly about the season of the rains, all over South Africa. Among



Redwing
Francolins.

Coqui Francolins.

ally shot scaling as much as from forty to fifty pounds. When the gum exudes from the acacia thorns, or when locusts are very plentiful, especially after heavy rains, the paauw probably attains its highest condition, and is then almost bursting with fat. Its flesh is certainly by far the best to be found among the various game birds of South Africa, and a paauw in good condition furnishes a delicious repast.

Thanks to its wary habits, this noble bustard offers some interesting but extremely difficult stalking. In open country it is more often than not bagged with the rifle. If the gunner is armed only with a shotgun and is riding or driving, he will find it probably his best plan to circle gradually in decreasing rings round the quarry. As likely as not the bustard

other notable game birds are Stanley's and Ludwig's bustards, two splendid species somewhat smaller in size than the paauw; the black koorhaan and the black-and-white koor-

haan, two very abundant species common upon almost all open country south and north of the Orange River; the beautiful Vaal koorhaan, the rare blue koorhaan, the bush koorhaan and others. With all these, excellent shooting is to be obtained. In forest and bush country the handsome rufus-crested bush koorhaan (*otis ruficrista*), with its silent, wavering, woodcock-like flight, offers some of the most charming of shooting to be found up-country. This bustard is a capital eating bird.

Sand grouse of four species are very abundant. These birds, known to colonists as Namaqua partridges, afford some extremely pretty flight shooting at vleis and watering places at sunset and early morning. They are, however, so common and so plentiful, and, it may be added, so tough of flesh, as to have little attraction for the colonial sportsman.

Quail of two kinds—the European quail and the harlequin quail—button

*Paauw is a Cape Dutch name, signifying peacock, a designation doubtless bestowed upon the bird from its habit of displaying itself in the courting season very much as does the peacock.

quail or hemipodes of two or three species, and snipe—the European great or solitary snipe, and the painted snipe—are, at different seasons, usually toward the rains, abundant in various parts.

As for wild fowl, their name is legion, and some of the finest shooting in the world with geese, duck, widgeon and teal is to be obtained in the vast spaces between the Zambesi and the Indian Ocean.

In fine, the man with the shotgun, wherever he may choose to wander in South Africa, may be always certain of finding some very interesting and often very abundant sport with an extraordinary variety of feathered game. Some of the most delightful days of the writer's life have been spent in pursuit of the game birds of the plains and rugged hills of South Africa.

HUNTING BLACK-TAIL DEER

THE BLACK HILLS AS A GAME PRESERVE

By F. C. Crocker

IT has been truly said, I think, that a successful deer hunter is always a true lover of nature. One hunting the Black Tail through the many canyons and rough brakes of the limestone formation has hundreds of opportunities to feast the eye on strange geological sights and an abundance of nature's curious freaks.

The Black Tail has many tastes in common with the mountain sheep; both of them prefer the rough broken precipitous dykes and canyons with the table benches close to the apex of the highest points; both evidently enjoy those wild views to be seen from the high points, for they are often found quietly resting on some point from which miles upon miles of broken country can be taken in at a glance; and these points of rest and observation are usually selected down wind from the only approach.

In a country which has been but little hunted Black Tail are comparatively easy to stalk successfully. They have a habit, after being jumped, of running fifty or a hundred yards, and then whirling about and standing for a look at the intruder, which is often fatal to the deer, because the hunter, knowing this peculiarity, naturally takes advantage of that moment to slay his game.

For four hours through a six-inch snow I had been trailing three Black Tail that had finally climbed a steep granite dyke, so precipitous that at times I could only pull myself up with the aid of friendly bushes. When nearly to the top

the tracks assured me I was close upon them, and I sat down to recover my breath. After a rest of a few minutes, during which my pumping heart dropped to its normal condition, I quietly peered over the point of rocks, and my eyes caught the moving tips of a deer's head. I straightened up and shot at the buck as he jumped, saw him flinch at the crack of the rifle, and fired a second shot quickly at a doe—for I was sorely in need of meat. Lowering my altitude as rapidly as possible, I followed the blood-besprinkled trail a hundred and fifty yards down a canyon, and soon discovered the deer on his knees, struggling to get up. Hurrying to within fifty yards, I gave him another shot, upon which he made a few jumps and landed on his back.

In dressing him I found one bullet had cut off the lower end of his heart and the other the upper end, and yet he ran two hundred yards! I saw by the trail that the doe was badly hit, and after hastily opening the buck I took up her tracks. It was getting late in the afternoon, so when I had followed the trail for half a mile I concluded to let the doe bed, and pick her up in the morning, as I had to go some distance for my pony in order to pack my buck out. I could not lift the buck to the saddle, so with my lariat I caught a small tree near the top, bent it over and thus made a spring pole. Securing the slack, I pulled down the top, and with a few hitches around the deer, and the assistance of the spring in the tree, lifted my game into the saddle, and hurried to take

advantage of the remaining daylight to get out upon a trail leading to camp.

The moon arose early, and I was making good time on my journey, half sliding and slipping down a steep decline into a canyon, when I heard a half-whine, half-cry, behind me. Being satisfied it was some wild animal which had crossed my trail, and been attracted by the fresh blood dropping from the deer, I gave it little attention, but hurried on. I had not gone more than a half-mile farther, however, before I was startled by the unmistakable cry of a mountain lion.

Just ahead was an open park of some twenty acres, and when I reached the opposite side in the shadow I stopped the pony, hoping to get a shot at "his excellency" as he came out into the moonlight on the trail. But it did not work as I expected, for the lion skirted the park, keeping in the shadow. Seeing this, I went on, the lion occasionally letting out that peculiar cry which produces shivers along one's spine.

Reaching another little park, I traveled along at a good gait, and when well in the shadows on the far side I whipped up the pony, sending him along at a trot, while I stopped behind a big tree. But Mr. Lion was a mind-reader, for he kept to the dark bushes, and not once showed himself.

After a two-hour walk I reached my cabin, and was soon sleeping the sleep of a tired hunter.

The next morning I was out fairly early to track the wounded doe. I picked up the blood-marked trail at the point where I had left it the afternoon before, and had not tracked more than a quarter of a mile before I ran on her bed; and it was painted red over its full outlines. But she had been jumped by two wild-cats, and in the next hour I counted fourteen beds from which she had evidently been disturbed by the cats.

From one close beside a rock, some six feet high, she had been jumped, and the snow was fairly well covered with deer hair which they had pulled out in their struggles to hold her. The track and blood were so fresh that I expected at every turn of the trail to come upon her, which I finally did, with the two cats between her and me. The cats darted into the thick bushes and the doe around the point of a rock and out of sight before

I could take a snap shot. I followed her trail until three o'clock, jumping her twice more, and gave her up at a point where her trail disappeared over a hog-back three hundred yards away. Later I was informed that two men picked up the trail the next morning and followed it for several hours, but did not get a shot; and yet I could hardly see how she ran so far after having lost so much blood.

There are yet fair-sized bunches of Black Tails in the Black Hills, but each year it requires harder work to attain much success, as they have become very wild from continuous hunting. The White Tails are abundant, but they are like jack-rabbits, always on the jump, and one seldom gets more than a flying shot.

It is six years since the last wapiti or elk was killed in the Hills, and that magnificent deer has not been seen in that section since.

When the army of white men went into the Hills in '76-'77 there were thousands of elk, and even now in a day's walk one will run onto their bleached bones in all directions; also upon buffalo heads by the hundreds. There are yet a few Silver Tip bear back in the deeper canyons, but the number is growing smaller each year. The White Tail deer are increasing in number, and will for a long time furnish sport to the careful hunter. There are also some few big timber wolves, but their preference is for young, tender colts, so they do not disturb the deer family much.

The Black Hills could be made one of the finest game preserves in the country if it were stocked with elk and buffalo and protected, as is the Yellowstone Park.

Some day, some man who wants to make his name immortal, may take the matter up, and in conjunction with the forest reserve bring it before the public. There are here thousands of acres of natural breeding ground and cover, with an abundance of water and springs and country so rough that wild animals, White and Black Tail deer, elk and bear find a home fully as congenial as the National Park for the purpose of naturally propagating. The hundreds of bleached buffalo heads now seen through the Hills is good evidence that it was at one time a great feeding ground for large herds.

DUCK SHOOTING METHODS

By J. Day Knap

FROM one end of this continent to the other, and from the Atlantic to the Pacific, wild fowl are to be found in more or less abundance, but the fact that they are still fairly plentiful, in the localities suited by nature for their feeding ground, is owing more to their migratory habits and remote breeding places than to the game laws, and protection from so-called sportsmen.

The two great forces that work against a plentiful supply of wild fowl are spring duck shooting and market hunters. Stop the former by law and boycott the latter, and ducks will multiply in spite of the tribute taken from their ranks by legitimate shooting.

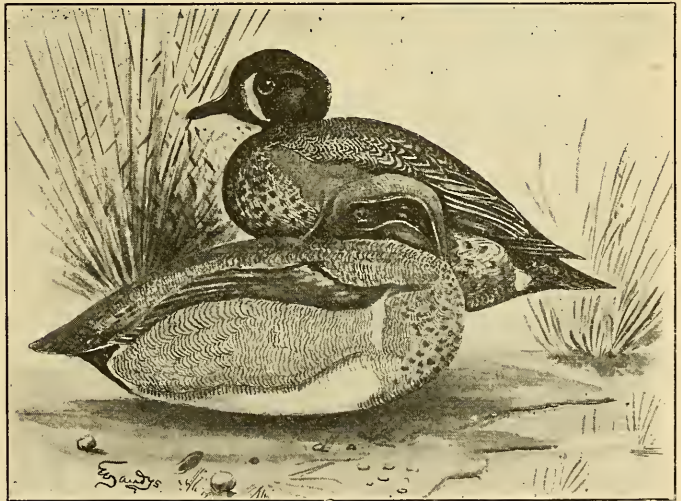
Much has been written about the peerless canvasback, and many hunters consider him to be the king of wild fowl, both for his flavor when on the table, and gaminess upon the water, but to me the wary old black duck surpasses him in cunning, and (although those who have only encountered him farther South, may not believe it) when fattened on wild rice in our Northern fresh-water marshes, is scarcely inferior to him in delicacy of flavor.

So we have as rivals a representative of each of the two great classes of wild fowl: namely, the divers and surface feeders. To the former belong the canvasback and his cousin the redhead, the broadbill or bluebill, the buffe-headed duck or butter-ball, the whistler and the many varieties of fish-eating sheldrakes and coots. Under the latter heading come the black or dusky duck, the mallard, the pintail or sprigtail, the widgeon or baldpate, blue- and green-wing teal and the wood or summer duck, swan, geese and brant.

In the autumn, the first ducks to furnish sport are blue-wing teal, black and wood ducks; the latter two varieties, in some cases, nesting as far south as Long Island. As the season advances, pintails, mallards and widgeon make their appearance, followed later by broadbills, redheads, green-wing teal and the rest, on their annual migration to warmer and sunnier climes.

Why sportsmen cannot be content with the fall months for shooting and let the fowl pass by in the spring unmolested, is more than I can understand. But as long as the present game laws hold, the returning birds find little peace until they reach the most remote regions of the North.

Another great mistake is allowing the shooting to continue for an hour after sunset, as is done by the laws in some States, for this practice results in frightening the ducks when they are settling down for the night's feeding, and tends to drive them from the locality much more than daylight shooting ever does.

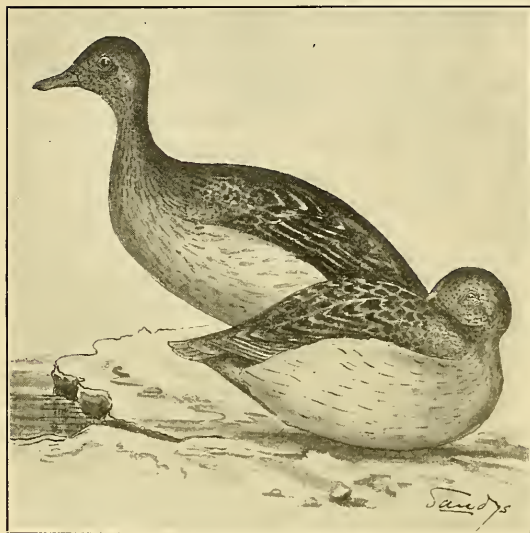


Green-wing and Blue-wing Teal.

The methods of hunting ducks are as numerous as the localities in which they are found, and close study is necessary for the hunter to obtain any degree of proficiency in each district.

The use of decoys is common, but the devices for concealing the hunter differ widely.

On the Chesapeake and its tributaries, in parts of the Great South Bay, in Barnegat Bay and down in the Carolinas, the



Black Ducks.

“sink-box,” or “battery,” is much used, and aside from its discomfort to the sportsman, it is a great device for killing all kinds of wild fowl.

It consists of a box big enough for a man to lie at full length, with flaps of wood and canvas extending on all sides, forming a platform about nine by thirteen feet. When the hunter has taken up his position within, and the proper amount of weight has been distributed about the platform, the machine floats even with the surface of the water and is completely invisible to the low-flying birds until they are well within range.

Decoys are anchored all around this “battery,” which has been placed on some favorite feeding ground, and the hunter lies on his back until a flock comes in to them, when he sits up and blazes away. His guide remains at a distance in a sail-boat, and at intervals comes and picks up the dead birds.

In cold, windy weather a more uncomfortable berth cannot be imagined. For, if it is at all rough, one is liable to a wetting, and this, added to the cramped

position in the narrow box, produces a condition which it takes a hardy sportsman to endure for any length of time.

The Chesapeake and its tributaries afford the best canvasback shooting, and here is where fowl find in great quantities the wild celery that imparts the rich flavor for which the bird is noted. Sportsmen from all parts of the country repair hither annually in quest of this, the most highly esteemed of water fowl.

On the Broad Water of Virginia, blinds made by sticking cedar trees and brush into the mud in shallow water are used with very good effect. Here the hunter pushes his flat-bottomed boat into the blind, and having placed his decoys in position, awaits the coming of his quarry in a more comfortable situation than his brother of the “box.”

Geese, brant and black ducks are killed in large numbers from these blinds when the weather is right, but little sport is obtained unless the wind is high and the temperature low, as the birds do not move around much on calm days, preferring to float about in the sun, and doze the hours away in peaceful laziness.

The Broad Water is a large bay on the eastern shore of Virginia, beginning at Cape Charles and extending northward for some ten or fifteen miles.

On the flood-tide the shooting is confined to the salt marshes, and decoys are placed in one of the numberless “leads” or creeks where the birds go to feed at high water. The sportsman here shoots from his boat hidden in the grass.

A variation of the blind is used on parts of Barnegat and Great South Bay. Instead of regularly-constructed bough houses, the gunner draws his boat up on shore, concealing it by pulling the sedge about the bow, and placing decoys in the usual manner.

The boats used are flat-bottomed, as a rule, decked over with the exception of a small cock-pit, and thatched with grass. The interior is made comfortable for the sportsman by a thick bed of hay, and in cold and windy weather he is well sheltered from the elements.

There is another method of wild-fowl shooting that is unique, and, to my knowledge, practiced only on the upper Hudson.

Here the ducks, mostly surface feeders, are not very plentiful, and competition is keen, although the shooting is mostly confined to local gunners, the bags made not being large enough to attract sportsmen from afar.

To the man who measures his day's sport only by the number of the slain, this kind of shooting will not recommend itself, but it will distinctly appeal to those who consider the well-earned brace worth more than the easily-obtained dozen.

The hunter (and on no other water does the sportsman so much deserve this name) sallies forth with his guide in a fifteen-foot open boat something like a heavy canoe. When the grounds are reached they go ashore on some point from which a good view of the surrounding flats may be obtained, and wait until a flock comes along and alights. Then they get into the boat, both seated on the bottom, and bending forward, concealed from view by a low bunch of cedar brush on the bow, the guide paddles carefully toward the feeding ducks, with a three-foot single-blade paddle.

This requires great skill and judgment, and the shooter's success depends on his guide's ability and knowledge.

Sometimes the birds will even become alarmed at the sight of this low and inconspicuous bunch of brush, and will stretch their necks and seem on the point of taking flight. In this case, the boat should be stopped and not the slightest movement made, until, having scrutinized the object of their fear, the ducks become satisfied that there is no danger, and once more begin feeding.

Then paddle again slowly forward until within range, and the sportsman's part of the proceeding begins. An hour is often consumed in approaching a flock of ducks, and many times the hunter is disappointed by their taking flight before it is safe to shoot, but this only serves to make him keener for the next shot, and when he is successful, the pleasure of outwitting the wary quarry is sufficient compensation for past failures.

I have often stopped the boat within forty yards of a flock of black ducks, and watched them feeding, preening them-

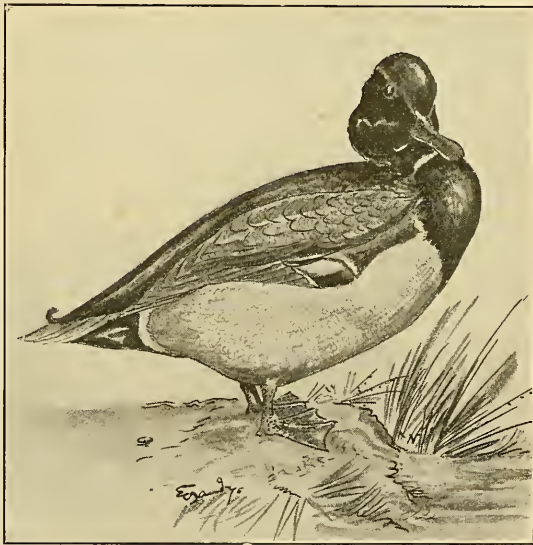
selves and swimming about, totally unconscious of my presence.

When by good luck the hunter catches a flock in the wild rice, or upon one of the numerous swamp creeks, his task is much easier, as there is plenty of cover for his boat and a good shot is invariably assured.

To paddle noiselessly up one of these creeks in the early morning when the mist is rising from the lily-pads, and everything is as still as death, is to me one of the most fascinating methods of duck shooting. You cannot tell at what moment ducks will rise with a roar of wings, as you slowly turn a bend in the creek, and steady nerves are required to do good shooting under these circumstances.

In other parts of the continent where wild fowl abound, the methods of hunting them differ only slightly from those I have described, and the sportsman will find, as a rule, that the local gunners are best adapted to give him good shooting, as the conditions that exist are thoroughly known and taken advantage of by them.

There is a great difference of opinion



The Mallard.

on the subject of guns and ammunition for duck shooting. From my experience, however, I would recommend any leading make of gun, ten gauge, weighing about nine pounds. Hammerless, of course, and both barrels full choke, for it is a rare thing to have a duck too near.

A good brand of black powder can always be depended upon, although many prefer nitro-powder on account of less recoil, noise and smoke, but after careful experiment, I have found that the pattern and penetration of black powder is equal

shoot by reading about it; practice, and practice only, will make a good shot, and sometimes even that fails. But a good rule, and one that any practical shot will indorse, is as follows:

On a crossing shot, swing with the bird until your sight is just ahead of its bill, then pull, and *don't stop the swing* of your gun. The same principle may be applied to all wing shots, and if the bird does not come down, rest assured that some part of this instruction was not carried out.

A great mistake made by many gunners is that of trying to kill ducks too far off. Fifty yards for a ten-gauge gun is the top range where a kill is certain.

Of course, birds have been brought down at much greater distances, and every sportsman can cite such instances; but they are chance shots, and only happen at long intervals.

Another and a strong objection to the practice of shooting at long distances is that so many birds are struck by spent shot, and carry them off to die in some secluded spot, doing the hunter no good, and causing needless suffering.

In closing, let me say to sportsmen all, if you desire duck shooting in future

to nitro, and is always the same, while the latter varies, being affected by dampness and other causes. In fact, I have seen shells loaded with the very highest class of nitro-powder, and only a few weeks old, that when fired would do little more than tickle a duck at thirty yards!

As to shot, No. 6 chilled is a good size for early autumn shooting, while later in the season, when the duck's feathers are thicker, No. 4 will do better execution.

For geese and brant No. 4's or even single B's are good.

A good make of paper shell loaded with $4\frac{1}{2}$ drams of slow-burning black powder, and $1\frac{1}{4}$ ounces of No. 4 shot, in a nine-pound, ten-gauge hammerless gun, is a combination that will do excellent work if properly pointed, and can always be depended upon.

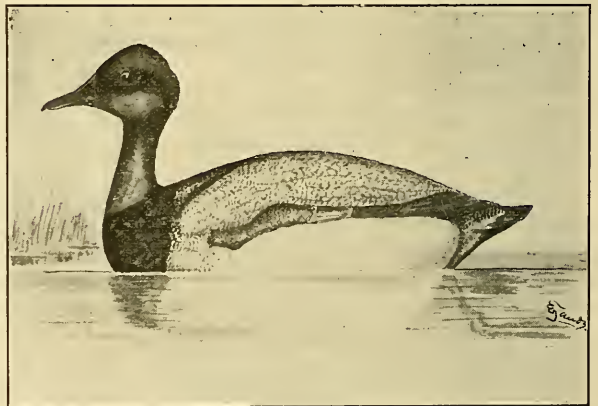
I have been greatly amused at times by reading directions in certain books and magazines as to how far it is necessary to hold ahead of a flying duck. One man would say fifteen feet, another ten, and so on.

To begin with, you cannot learn to

years, get together and stop spring shooting. Discourage the "game hogs," and when you have killed enough birds, go home, and do not try to break the record!



Wood Duck.



Canvasback.

THE SCORING OF THE RAJA

By W. A. Fraser

BURRAPARA was Raja of his own domain after a fashion. The domain of Burrapara was on the Madras side, two days steady steaming from Calcutta.

His father, the old Raja, aided by a



Burrapara Himself Was a Sportsman.

bull-necked *Dewan* (Prime Minister), had ground down the *ryots* (farmers) for tax money until the whole Raj had become practically bankrupt.

Then the British *Sirdar* (Government) stepped in and platonically arranged things. That's the *Sirdar's* prerogative in India.

Under the new regime thirty-six lakhs a year flowed into the coffers, and the burden on the shoulders of the *ryots* was lighter than it had been in the memory of ten generations. The Raja was allowed twelve lakhs a year for himself and court, while the *Sirdar* took the other twenty-four for managing the country, and for the indefinite incidentals.

The Double X Hussars were stationed at Burrapara as part of the governing faculty. It was like sending a public school to a watering-place for duty. There were white palaces, and leisure Brahmins, and horses without stint; a big polo ground, a fine race-course and a proper Oriental atmosphere as background.

The Double X contingent had everything in life to make them happy—everything except the Burrapara Cup. Each year for two years they had reached out with a by-your-leave-gentlemen for this bit of plate, but both times it had gone back to grace the sideboard of the Raja.

Burrapara himself was a sportsman from the first tinkle of the bell. He gathered leopards and kept them in a cage, and once a year turned them out on the plain for an improvised pig-sticking bout—this was at Christmas time.

Then the Double X took themselves to horse and hunted "spots" with their lances. In three years only two fellows had been mauled with sufficient intentness to cause their death—that is, two European officers; perhaps a score of beaters and shikarees had also been mauled, but they were His Highness's subjects, and did not figure on the European side of the ledger. So it was good sport, and of a fair interest.

The polo was as fast as they played it in Tirhoot; which was like looking at the game from the topmost pinnacle. And not one of the Double X played a bit faster or closer on the ball than Burrapara himself.

From an earthly point of view it was almost a paradise for men whose lines were cast along that plane. As I have said, the only unreasoning thing was the Cup—they could not get that. Yearly it sat big in pride of place at the annual Race Meet. It was donated by the Raja for an open handicap steeplechase of three miles. It was a reactive donation, for his own stable always won it. That was why the Double X were sad.

On the third year their dejection terminated in a righteous determination to win the elusive bauble even if it broke the Mess of the regiment.

Captain Woolson started it. "If you fellows will back me up," he said, "we'll land that mug this try."

"Going to ham-string the Raja's horses?" Devlin asked. But Devlin had no head for deep plots—Woolson knew that; he was only a lieutenant who danced well.

"The Raja gets this crazy old plate back every time because he's got the best nags," Woolson observed with an air of conviction.

"There may be something in that," Devlin answered, setting his glass down with a clink of ironical conviction.

"Devlin, you're an imbecile. You make remarks that are not in the game. What I mean is that we haven't a gee-gee in the whole bally troop that Burrapara can't give pounds to with at least a dozen Arabs."

"That's what's the matter, Woolson," one of the Mess said; "we're beaten before the race starts—that's what's the matter with getting the Cup."

"It's a great discovery," commented Devlin, sarcastically.

"Look here, youngster, shut up!" drawled Captain Lutyens, wearily; "it's too hot to blather. Woolson's got a scheme, or he wouldn't be talking—talking's all rot, anyway."

"Yes," continued Woolson, "the Raja is as slick as a Brahmin. He gets fifteen or twenty Arabs down from Abdul Rahman at Bombay, gallops them a bit—God knows where, we never see the trial—and the best of the lot is chucked into this handicap light, being a green one, and beats all our well-pounded nags out."

"Oh, fiddlesticks!" exclaimed Devlin, impatiently; "all the fellows know that. Your discovery is like going to hear 'Pin-afore'—it's antique. Besides, it's not the Raja at all; it's O'Neill that does the trick. You're an unsophisticated lot, and O'Neill knows just what your nags can do. What do you suppose the Raja keeps him for—his beauty? It's to play the English game against you Feringhis."

Lutyens threw a box of matches at the speaker's head by way of entreaty, and the latter went out on the veranda, swearing there was a conspiracy to keep him out of the good thing.

"Go on, Woolson," said Lutyens; "tell us how to do up the Raja. That young ass is out of it now, so let's have the disclosure."

"Well, we'll have to get a horse down from up country on the quiet and do the trick. What do you think?"

"Where'll you get him?" asked Lutyens.

"Some of you fellows remember Captain Frank, don't you—Frank Johnston?"

"I do," ejaculated Lutyens, decisively. "I've had to live in retirement financially since I joined him in a big thing we were to pull off at Lucknow once. But he's always got a fast horse; generally—yes."

"Well, he's got one called Saladin now, that you simply couldn't handicap down to the form of the Raja's lot."

The others waited, and Woolson continued unraveling his brilliant plot. "I saw a note in one of the Calcutta papers about this Saladin brute, and wrote up to Doyne. Doyne says he's dicky on his legs, but he'd stand a prep for one race, especially in the soft going here. He's never won yet, because his leg wouldn't stand training on the Calcutta course. It's as hot and hard as a lime-kiln, as you fellows know. If we could buy him from Captain Frank, and play him a bit in polo here, he'd be sure to get in the handicap with a light weight, and we'd even up things with His Highness."

"I'm in it, if it's all on the square," broke in Lutyens; "the Raja's a good sort, and we must have it all straight."

"Gad! I'll tell him we're going to win with Saladin, if we get him," exclaimed Woolson. "But we mustn't let Captain Frank know about it; he'd never let any sort of a game go through unless he were Viceroy of it himself. We'll get Doyne to buy the horse, and Johnston can discover accidentally that he's being sent up to Tirhoot among the indigo sahibs, or to Heaven, or to almost any place but here."

"I'll stand doing Captain Frank up," muttered Lutyens. "His hand is against every man, and, *pro tem*, we'll send a punitive expedition against him. I don't mind that a bit."

The truth of the matter as concerning Woolson was that there was a standing feud between him and Johnston over some up-country race deal, and he knew the Captain wouldn't sell him a horse at any price.

So that was the inception of the plot. Woolson was commissioned to acquire Saladin. He wrote his friend, Captain Doyne, to buy the horse as cheaply as he

could—warned him against Captain Frank's rapacity, and explained that Saladin would be supposed to go to any part of the British Empire but Burrapara.

Doyne executed his commission with diplomatic enthusiasm. Johnston wanted 3,000 rupees. Doyne offered 2,000 and half the horse's winnings for a year. Theoretically that should have represented a considerable sum—in point of fact, Doyne chuckled softly to himself over this commercial victory, for he knew that Saladin would only win the Cup at Burrapara, and no prize money.

The horse was bought and shipped in a round-about way to his new owners.

Woolson played him in polo just twice, then pretended to make a discovery. "I'm going to keep that chestnut brute for the races," he assured the Raja; "he can gallop a bit."

Burrapara smiled pensively, for he had Shahbaz in his stable, and it would take a rare good one to beat him.

O'Neill was an ex-Hussar officer who

Chief of the Stables to His Highness. O'Neill also made a discovery; the Raja would never have found it out for himself.

"Look here, Your Highness," he said, "the Mess have got hold of a good thing at last. I don't know where they *pak-aroed* that white-faced Arab, but he's a rare good one. He'll beat Shahbaz for the Cup."

"And——?" said the Raja, with Oriental control.

"We must play the game, too, Your Highness."

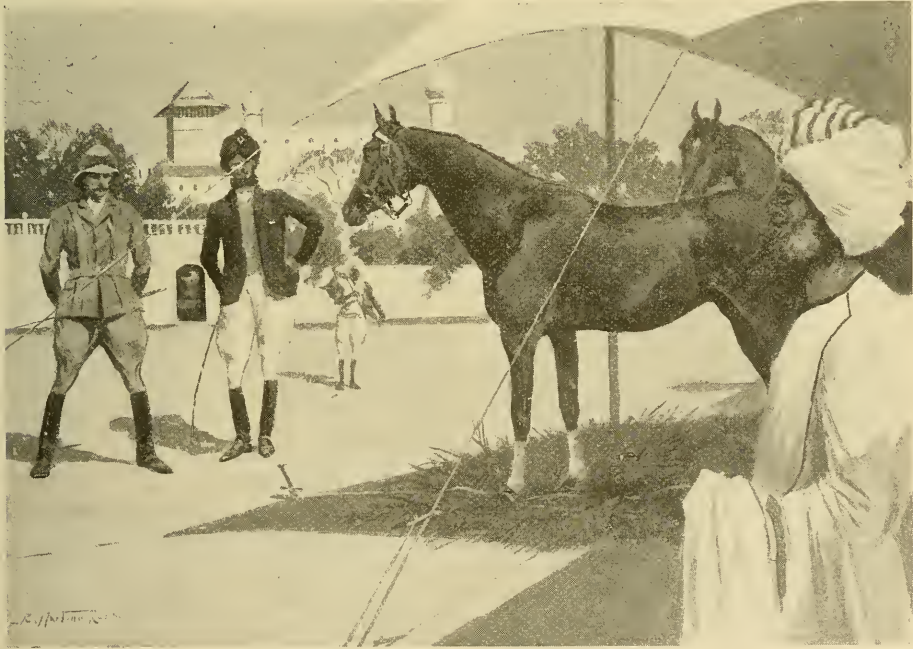
"You know best, O'Neill Sahib. It's in your department." The Raja liked to play at officialdom.

"Shall I get a horse to beat them, Your Highness?"

"What appropriation do you require?" asked Burrapara.

"Perhaps three or four thousand, Your Highness."

"I will command the Treasurer," replied the Raja, laconically.



"In Two Weeks May Queen Was in the Rajas' Stables."

had found the service too fast for his limited income. Influential friends had farmed him out to the Raja, and he was what might be called Commander-in-

Now, as it happened, O'Neill, before he left the service, had swung along in the racing game beside Captain Frank Johnston. "Frank knows every horse in In-

dia," he mused, "and if the rupees are forthcoming, he'll get just what I want."

So he wrote by the first mail steamer to Johnston: "The fellows down here have picked up a horse, somewhere, called Saladin. Do you know anything about him? I saw them try him out, and he can gallop like a wild boar. If you've got something in your stable to beat him I'll buy it, or lease it. It's all about the Raja's Cup, three miles over timber, for Arabs and Countrybreds. Captain Woolson is at the bottom of it—I think you'll remember him."

Johnston puckered his thin lips and whistled long and softly to himself when he read the letter. "My Aunt!" he ejaculated; "they played softly. Who the thunder told Woolson about Saladin? And the swine had the *baboo* diplomacy to worm him out of me on a half-winning game—the white Bengalie!"

He shoved the letter in his pocket, lighted a cheroot and played chess with this new thing for three days. Then he wrote to O'Neill:

"Woolson was born of commercial parents—he gets this thing from his father, who was a successful soap merchant. They bought Saladin from me to go up country. The Raja has my sympathy if he hopes to beat the chestnut with anything he's got there. I have nothing in my stable could look at him over three miles of country.

"But, all the same, I think we can beat out this joint stock company. I've got May Queen, and Saladin has always been worked with her. He's a sluggish devil, and has notions. He won't try a yard so long as the mare is galloping beside him; that's because they've worked together so much. He'll just plug along about a neck in front of her, and the more you hammer him the sulkier he gets.

"If you've got something fairish good in your stable, and the Raja will pay well for the expedition, I'll send 'the Queen' down, and go myself, later on, to ride her, for the edification of our friend, the soap merchant's offspring. I'll guarantee you'll beat Saladin; only you must have something good enough to do up the others. Don't let them know from where you've got the mare."

These affairs of state were duly laid before the Raja by O'Neill in a general way, without too much attention to de-

tail. Kings as a rule don't care for detail; they like to win, that's all. Burrapara simply gleaned that by the aid of a mare, a certain Captain Frank and his own good Shahbaz, he was to win once more his favorite toy; also triumph over the united ingenuity of the Double X Mess. The executive duties he left to O'Neill; also spoke the necessary word to the Treasurer.

In two weeks May Queen was in the Raja's stables, and the wise men who had gone out of the West knew not of this back-wash in the tide of their affairs.

Two weeks later Frank Johnston sauntered into the Mess of the Double X with his debonair military swing, as though he had just returned from a week's shikar, and lived there always.

"Great Gatlings!" exclaimed Lutyens, "where in the name of all the Brahmins did you come from? Johnston, by all that's holy!"

"Nobody ever come here any more?" queried Captain Frank, languidly, pitching into a big chair.

"Heaps of ordinary chaps," answered Lutyens.

"Came down to the fair to pick up some smart polo ponies," Johnston volunteered. "Any racing at the fair?"

"Plenty—of sorts," grunted Lutyens, thinking dismally of the accursed fate that had steered Captain Frank their way just as they had fixed things for Saladin. "Make yourself at home, Johnston," he added, after a few minutes; "I've got to make a call."

Then he posted down to Woolson's bungalow. "Guess who's here?" he said.

"Judging from your look of painful interest, I should hazard the opinion that the Commander-in-Chief had swooped down upon us—thought the 'C. C.' was in Simla, though."

"No—Johnston!"

"Good God! Not Captain Frank?"

Lutyens nodded. Woolson turned pale. "Does he know?" he asked dismally.

"Don't think so. It's a pure fluke, his coming; he's down after polo *tats*."

"He'll stay for the races, sure. And he'll spot Saladin; he's got devil eyes, that chap," muttered Woolson, dejectedly. "We'll just have to tell him the whole affair and ask him to keep quiet. You had better put him up at your bungalow to keep him out of their hands."

So that night Captain Frank learned to his great surprise that Saladin was in Burrapara. Gracious! but he *was* surprised. How had it happened—he had understood Doyme was sending him up country?

Woolson told the Captain a fairy tale about that part of it; but he had to be made free of the secret that they hoped to win the Cup with Saladin."

"Don't tell the Raja, nor O'Neill, where we got him," begged Lutyens. "The honor of the Double X demands that we win that cup."

"I'll tell nobody," said Captain Frank. "Let everybody find out things for themselves; that's my way of working."

They cracked a bottle of champagne to this noble sentiment, and all that belonged to the Double X was placed at the disposal of Captain Frank during his sojourn amongst them. The Raja had a dozen bungalows, splendidly furnished, always at the command of visitors, and Captain Frank assured Lutyens that one of these had already been placed at his disposal, so he declined the Double X Captain's hospitality. "Hang it!" he said to himself, "I can't eat his rations, and sleep in his bed, and play against him—that's too stiff an order."

As race day approached events outlined themselves more clearly. The Raja had three horses entered for the Cup; Shahbaz, May Queen and Ishmael. Woolson had Saladin, and there were six other entries, not calculated to have much bearing on the history of the race.

"What's this *May Queen thing*?" asked Lutyens.

Nobody knew—not even where she had come from. She was a countrybred without a record; that's all that anybody could say. It didn't matter, anyway; Shahbaz was what they had to beat, that was certain. O'Neill was riding this pick of the stable himself.

Two evenings before the race O'Neill came over to the Mess. He wanted somebody to take the mount on May Queen; the boy who was to have ridden her was ill, he explained.

Lutyens suggested that Captain Frank should take the mount. Not being in the Double X, he would be disinterested. O'Neill declared that he didn't know much about the mare, but she might run fairly well.

Frank agreed to ride for the Raja. Then they all sat tight—Fate and the rest of them—until the night before the race, when a big lottery was held at the Mess over the next day's sport.

All along Woolson was getting suspicious. What was Captain Frank doing down there, anyway? He put a servant on to watch Johnston, and learned that the latter hadn't bought a single polo pony. And the mare! with Johnston up—though, of course, it looked like an accident his having the mount—due to Lutyens's suggestion.

In spite of all that, it was awfully like one of Captain Frank's diplomatic plays. He remembered that O'Neill and Johnston had raced together considerably in the old days.

The fact that May Queen was so completely a dark horse gave rise, somehow or another, to the idea that she was likely to win, and Woolson was not alone in his determination to back her in the lotteries.

The Mess, knowing that they had a good thing in Saladin, stood loyally by him in the betting, and he went high. Johnston started the ball for May Queen by bidding on her, remarking apologetically that he would back a wheelbarrow if he rode it himself.

"You're pretty slick, Mister Frank," Woolson muttered; and he, too, played the mare with grasping confidence.

The Raja's horse, Shahbaz, had been almost friendless and O'Neill had bought him cheaply enough.

After the lotteries Captain Frank assured Woolson that he had bought Shahbaz, and offered him a share.

"No, thanks," the Hussar answered; "I've got Saladin, and your mount, May Queen, and think I'll win out."

Then, because Captain Frank loved to chase a pig far afield when he was sure of a spear, he begged the other man for a share of May Queen.

"Not an anna of it. I'll stick to the lot!" declared Woolson, shutting his jaws with an avaricious click.

"You fellows are a badly lot of sharks. You've got all of Saladin, all of May Queen, and want the rest of us to go for glory and the love of the thing. But you had better trade off some of the mare for a bit of Shahbaz to make sure," Captain Frank said, in answer to the other's refusal.

A little later Captain Frank rehearsed this scene to O'Neill. "I pretended to want a bit of Saladin, or May Queen, but Woolson wouldn't part with any. Lord! but the father is big in the son. Stuck to his pound of flesh like a proper Marwarrie. Then I offered him some of Shahbaz in the lottery, but he shut up like a knife; he was afraid I'd force it on him. Tomorrow, after Shahbaz wins, I'll say to him: 'I wanted you to take a bit of the good thing'; but he'll scowl, because he'll be sick at his stomach. I'll teach them to

around until he finds out something, then wants a share."

"I wish he hadn't come," said Lutyens, abstractedly. "Heaven knows what he'll do; he's like a Hindoo juggler."

"He can only win out on May Queen," retorted Woolson, crabbedly, "and I've got the biggest part of her in the lotteries myself."

"Yes, but the other fellows are all down on Saladin, and it's the Cup we're really after, not the rupees."

Woolson said nothing to this. The Cup



"Saladin Struck the Rail Heavily."

get a good horse out of me to do up a fine chap like the Raja, and then pay for him out of stakes that are not to be had."

Woolson's version of the same thing to Lutyens was slightly different, which only goes to show that human nature is a complex machine.

"Johnston's got stuck with Shahbaz in the lottery, and he's been trying to unload on me. He wanted a piece of Saladin. That's Captain Frank all over; pokes his nose in here on our good thing, roots

was all right, as a cup, but it would suit him to land his big coup over May Queen.

It was time to mount for the Burrupara Cup. As they jogged down to the post, Captain Frank ranged alongside of Woolson, who was riding Saladin, and said: "You'd better take half of Shahbaz still." But Woolson tickled his mount with the spur and swerved to one side, pretending not to have heard.

O'Neill was on Shahbaz, and to him Johnston said: "When we've gone half the

journey you slip out in front before Saladin gets his dander up. I'll keep close beside him and he'll never try a yard. But keep well on in front, so as not to draw him out."

For a mile and three-quarters half a dozen of the nine starters were well up. As the pace increased and Shahbaz drew away in the lead, the others, all but Saladin and May Queen, commenced to drop out of it. At two miles the Raja's horse was six lengths in front; Saladin and May Queen were swinging along under a steady pull, neck and neck.

"He means to stick close and beat me out," mused Woolson, eyeing Captain Frank stealthily.

"The blasted idiot is kidding himself," thought Johnston. "He thinks he's got to hang on to my coat-tails to win."

Saladin was keeping his eye on May Queen. He had been separated from his stable-mate for weeks, and now he was galloping along beside her as in the old days. His soft Arab heart was glad. What a pity she couldn't gallop a bit faster, though. The thrill of strength was in his muscles, and he would like to unstring his great tendons that soft, warm day, and spurn the red, yielding earth. His leg wasn't a bit sore; and there was another horse on in front. Why couldn't May Queen hurry up.

Soon his rider's legs commenced to hitch at his ribs, and Woolson was chirruping at him to move on. If they'd only push the mare out a bit he would.

Woolson was getting anxious. There was only half a mile to go now, and Shahbaz was still well in the lead. He had ridden Saladin under a pull all the time, and fancied that his horse had a lot left in him; but now, when he shook him up, he didn't respond.

"Go on!" he shouted to Captain Frank: "we'll never catch Shahbaz."

"Go on, yourself," answered the Captain, in schoolboy retort.

The Hussar brought his whip down on Saladin's flank. Stung by it, the Arab sprang forward, and for a second the rider's heart thumped with joy. He felt the great muscles contract and spread under him, and fancied that he would soon overtake the dark bay in front. The mare struggled, too; Saladin heard her laboring at his quarters, and waited patiently.

"Steady, you brute!" Captain Frank

ejaculated to the mare; but Saladin knew the voice, and after that the man on his back amounted to very little in the forces governing the race.

With whip and spur, and profane appeals, Woolson labored at his mount, throwing him out of his stride a dozen times. May Queen struggled and strained every nerve to keep up with her stable companion. Saladin rebelled against the fool who was riding him, and sulked with Arab persistence; raced as he had always done at home with the mare, neck and neck.

Shahbaz was tiring badly. At the last fence he nearly fell—striking the top rail with his toes out of sheer weariness. There was only a short run in on the level now. Would he last out? If Saladin ever ranged alongside of him it would be all over; Johnston knew that. In the struggle the Arab would forget about May Queen and shoot by Shahbaz as though he were dead.

Woolson was in an agony of suspense. It looked as though Shahbaz would certainly win; and he might have saved his money by taking Frank's offer. A sudden resolve seized him. His mount was sulking; and he was worse beaten than the horse—he could not ride him out. He would take Frank's offer now.

Bending his face around toward Johnston he gasped: "I'll—take—half—Shahbaz——" Then he disappeared. That final grab had effectually settled the race. They were rising at the last jump, and his movement caused Saladin to swerve. The horse struck the rail heavily, and Woolson was shot out of the saddle and planted inches deep in the soft earth on the outside of the course.

It had looked a close thing from the stand. "Saladin'll win in a walk," the Mess fellows said just before the fall. "Woolson's been waiting on O'Neill, and now he'll come away and win as he likes."

When their companion vacated the saddle so energetically, a groan went up from the group of officers. When Shahbaz slipped by the Judge's stand, three lengths in front of May Queen, they groaned again, but with official politeness cheered lustily for the Raja.

His Highness sat complacently eyeing the excited people. It was a very small thing to get agitated about, for he had won, you see.

CHINESE SPORTS AND GAMES

By Isaac Taylor Headland

OF PEKING UNIVERSITY

THE Chinese have usually been regarded as a people who care nothing about sports and games. Even so eminent an authority as Archdeacon Gray has asserted that, "The Chinese are not much given to athletic exercises," and Doolittle seems to partly confirm this assertion when he says that "Their sports do not require much physical exertion, nor do they often pair off, or choose sides and compete, in order to see who are the best players." Dr. S. Wells Williams is more guarded in his statement when he says that the "active, manly sports are not popular in the South." This, of course, is easily accounted for by the climate, and the remarks made by Doolittle and Gray may have been made regarding the South. They certainly do not apply to the latitude in which Peking is situated.

Knowledge is power, and the Asiatics have possessed it in a marked degree for

without being able either to run the one or milk the other as well as a less wise but more skilful engineer or a country maiden.

Three things, therefore, are necessary to sportsmen: Nature to prompt, intelligence to contrive, and skill to execute. Where the natural desire is wanting there will be few games; where intelligence is wanting the games may be many, but they will be simple; where skill is wanting there may be many complicated games, but all badly played.

I confess I have never seen a people whose children were more given to play than those of the Chinese. Yet their games, like their language, literature, philosophy, science, architecture, instruments, tools, government — everything else Chinese — have never gotten beyond what may be called the elementary stage.

Nature certainly prompts them to play, and no American boy ever went out of school with more of a bound than the Chinese boy or girl goes to the playground. They must have exercise and entertainment, and so the ball, the bat, the marble, the top, the cash, running, jumping, hopping, lifting, throwing, swimming, skating and such other sports as circumstances suggested came into requisition. But there the matter stopped. They had the game which served both to entertain and exercise them, but they lacked the impulse to improve it, and as a consequence they have never acquired the skill which is acquired by boys of the West.

The games played by Chinese children are in many cases interesting, but in few are they complicated. They have nothing which corresponds to the more intricate games of the West, such, for instance, as cricket, football, baseball, croquet, golf and a hundred others.



Kicking the Shoe.

almost countless generations. But there is something more than knowledge necessary to the successful game-player. It is skill.

One may know all about the structure of an engine and the anatomy of a cow

Chinese play-life is, however, probably as rich as was the play-life of European children a few centuries ago. It is confined more completely to children and youth, and lacks the enthusiastic element of the West, which gathers large crowds of men to watch trained teams or couples putting into public operation the skill they have acquired through months of training.

One of the roughest, and, consequently, one of the most manly sports of the Chinese is called "pitching the stone lock." This may be played by two or by half-a-dozen young men who have the requisite daring, muscle and skill. It is played with a large stone in the shape of a Chinese padlock. In private practice these stones are used much as dumbbells, and often weigh fifty to sixty-five pounds, sometimes more. When designed to be pitched, they are lighter, weighing not more than from fifteen to thirty pounds apiece.

The game is played by young men from twenty to thirty years of age, who usually strip to the waist. They arrange themselves in a ring, if there are more than two, and one of them pitches the stone up into the air from ten to twenty or more feet, whirling it at times as rapidly as he can make it whirl, in the direction of the second man, who catches it by the handle as it comes down. To the looker-on it is a risky—not to say dangerous—game, but it is the element of risk or danger that makes it attractive. The person who catches it pitches it in the same manner to his next neighbor, and so it goes around the ring.

Another exercise, called "throwing the sand-bag," is played in the same way, except that a bag is filled with small bits of iron made round by pouring molten metal through a sieve into water. The sand-bag is equal to the stone lock in weight, but it lacks its danger and risk, and, as a consequence, its interest and popularity, for there is not one person who pitches the sand-bag where there are a score who pitch the stone lock.

Neither of these games is calculated to develop all the muscles of the body, as does the game or exercise called *chü tun*

tzu, or "lifting the stone dumbbells." The dumbbell is made by fastening two stone wheels, varying in weight from seventy to one hundred and sixty pounds, to the two ends of a pole or iron bar four or five feet long. The practitioner takes the



Wrestling. "Catch as You Can."

pole in his hands, raises it to his knees, then to his body, his breast, his face, and finally above his head. He pushes it out in front at arms' length, and often uses it in performing various feats of skill, such as resting it on his neck or shoulders and whirling it round. This exercise is particularly common among students and men of leisure.

Another game played by boys and young men which is a strong argument against the Chinese-do-not-love-vigorous exercise theory, is called the "man-wheel." It requires five persons. The largest stands in the middle with two others on his right and left, one facing the direction he faces, and the other the opposite direction, each having an arm over his shoulder and clasping each the hand of the one on the other side of the center player. The center one then takes one hand of each of the two outsiders, who are the smallest boys. They with their other hands clutch the girdle of the other two boys, who also take hold of their girdles. Thus they are all bound firmly together. The wheel then begins to revolve. The small boys are gradually lifted from the ground, swung in the air and go whirling around in an almost horizontal position. It is a very pretty game.

Among the Chinese games there are a large number, both for men and boys, which tend to develop skill on the part of the player. Among these one of the most interesting is horseback archery.

Just north of Peking there is a race-track. The Chinese race-track is straight and not circular, like ours. It is dug out a foot or two beneath the surface and the dirt banked up on both sides. It is from two to four feet wide, level and very solid. Along one side of this race-track there is set up three or more rolls of matting fifty to one hundred feet apart. The rider starts with three arrows in his girdle, the reins of his bridle being hung on its saddle, and the horse trained to go at full gallop. He is expected to shoot these arrows into the three

rolls of matting as he passes. The nearer the rolls of matting are together the more difficult the task becomes, for then he lacks time to fix his arrow and take aim.

Horse-racing is not confined to target practice. In different parts of the city these scooped-out race-tracks may be seen, and in them men are constantly practicing their Mongol ponies. The pony seems to enjoy the exercise as well as the

men, for he exhibits all the nervous strain of the racer while his head is being held by the starter. After these horses have been properly trained, I am told they have a wide, level track south of the city, where competitive races are held at stated intervals.

If the Chinese have a national game, and I think they may be said to have, it is a species of battledore and shuttlecock, the feet, hands, arms, head, shoulders, any part of the body answering as the battledore, while the shuttlecock is composed of a cash (copper piece of money) covered with cloth, to which is fastened a bunch of feathers, which act upon the cash the part of a parachute, causing it to descend very slowly.

There may be three, four or more players, who arrange them-

selves in a ring, when one of them kicks the shuttlecock up with the side of his thick-soled shoe. It is kicked up by the one to whom it comes nearest, never being allowed to touch the ground. Sometimes they permit it to descend behind them and kick it up by a backward stroke, and sometimes they jump up, giving it an under-leg kick. Some of the players become very expert. It is a game which is



The Man-Wheel Game.



Acrobatic Tumbling.

dignified and quiet, requires little exercise, develops a large amount of skill and is well suited to a company of scholars.

Kite-flying is another game indulged in by all ages from seven to seventy. Their kites are of all shapes, such as human figures, birds, dragons, centipedes and frogs, many of which have strings stretched across them which play the parts of an Æolian harp. One of the tricks with these kites is to send food to them. This is done by hanging on the string something which will be easily carried by the wind from the ground to the kite. Another trick is to fly two of them close together and then, by sudden jerks, cause them to fight—that is, to dip around each other. In season one may count thousands flying over Peking at one time.

The instinct of kicking is strong in all children, and in the Chinese not less than those of the West. It is seen in such games as "kicking the shoes," in which all the players take off their shoes, pile them up in the center of the ring and at a given signal all kick them, and then grab for all the shoes they can get, each for the time-being keeping what he gets. It is amusing to see a large boy get a small shoe, or a pair of shoes, or, if he is very agile, three shoes, but able to wear none of them, while a small boy gets only one shoe and that too large for him.

"Crutch-bumping," which needs no explanation, is of the same nature.

"Kicking the marbles," played by two or any number of boys or young men, contains elements I have never seen in any other game, and is one of the most popular played in the capital.

The players have two stone marbles an inch and a quarter to an inch and a half in diameter. They put one on the ground, and, with the front part of their shoe on it, give it a shove. Then they put the other down and kick or shove it in the same direction, the object usually being to hit the first. The first boy tries to leave them in such a position as to make it difficult for the other to kick them with any prospect of success.

There are two ways, however, in which

one may win. The first boy says to the second:

"Kick the ball north" (south, east or west) at one kick.

If the second fails to put it in the position suggested he loses and the other



Kicking the Marble.

wins. If he succeeds he wins. He may then kick it a second time to hit the other ball. If he strikes the other ball he wins again. If, when told to go north, he kicks it so as to strike the other ball and still go north, he wins double, and gets two kicks more.

If in these two kicks he puts the ball in a position where it is very difficult to hit, and then tells his companion to kick, the latter may refuse, and thus he must play the difficult game himself, in which, if he fails, he loses and the other wins. In other words, it is a game in which the player who sets a difficult task for his companion to perform, like Haman, is always in danger of being hung on his own gallows.

Contortions and acrobatic games are popular with all classes, and the horizontal bar is brought into frequent use. For this purpose the children invoke the friendly aid of a tree limb, or, in the absence of a limb, they appropriate a carrying pole, two of their own number acting as supports. And on this they "skin the cat," hang suspended by the heels, the toes, the bends of the knees, or the arms, or go whirling around, much like an American boy, on his similar but improved gymnasium.

This, however, is only a part of their acrobatic performances. I have seen the boys bend backward and pick up a handkerchief with their teeth, and, on one occasion, I saw a slender boy stand on a bench and perform the same feat by bending backwards.

Wrestling is also popular. Nothing, however, is done in a scientific way. In wrestling they usually "catch as you can," and "trip as you have opportunity."

I have never seen them box, and I doubt if they know anything about it, as it is a well-known fact that when Chinese fight they never strike out from the shoulder, but only pull hair or strike with the palm or scratch.

There are a large number of games played by boys and girls from eight to sixteen years of age, which might be classed under the heads of catching-hand games, blind-fold games, quick-reaction games, guessing games, games which develop the parental or protective instinct, the instinct of curiosity or hunting and catching, the instincts of striking, pounding, kicking.

They have also bumping, hopping and games which illustrate all the various employments of life, together with a large number of miscellaneous games which

games which are specially adapted to little children, and which would properly come under the head of "Finger, face and body games." There are numerous games which correspond to our "Little pig went to market," in which the mother or the nurse takes hold of the fingers or toes of the child and repeats a rhyme like the following:

"This little cow eats grass,
This little cow eats hay,
This little cow drinks water,
This little cow runs away,
This little cow does nothing,
But just lies down all day;
We'll whip her."

With which they playfully slap the bare foot of the child. Or, corresponding to our "Knock at the door," they repeat as they refer to the various parts of the face:

"Knock at the door,
See a face,
Smell an odor,
Hear a voice,
Eat your dinner,
Pull your chin or
Ke chih, ke chih."

I have in my possession descriptions of more than fifty games such as given here, collected in Peking alone, and have no reason to believe that I have secured even a large proportion of what are played there. Indeed, in looking over my photographs for the purpose of illustrating this article I am reminded that I have omitted to mention two of the most active, "Tumbling," at which they are very proficient, and "Hockey," over which the players get almost as vociferous as we do. I leave the reader, therefore, to judge as to whether or not the "Chinese are much given to athletic exercises." It would not be surprising, even if it were nearer the truth than it is, for the mind of the Asiatic runs more to mysticism than to physical culture. No religion has ever



Hockey.

been carried to any degree of perfection that did not originate in it, but its science, like its sports, has halted short of that of its Western contemporaries. The awakening is nigh. It has come in Japan; it will follow in China.

cannot be classed under any of these heads, among which might be mentioned counting-out games, like "tit, tat, toe," and games with crickets, birds and cocks.

I cannot close this article in a better way than by calling attention to the

INSECT STUDIES WITH THE CAMERA

By Clarence Moores Weed

THE camera, like the human eye, sees whatever its owner is interested in. If he love beautiful landscapes, it gives him pictures of them; if he love the fleecy clouds, it brings them down to him; if he love children and happy human faces, it gives them to him for his life-long delight; if he love the birds, it transfixes them in their flight, yet leaves them to soar in the air unharmed. So it is not strange that every one, nowadays, must have a camera to enrich life and to give permanent record to its transitory phases.

To the student of the teeming insect life which fills the outer world with such marvelous organisms, the camera may become of inestimable value. It enables him to perpetuate pictorially phases of their existence so evanescent that it is hopeless to attempt to get accurate drawings of them, while, with very little trouble in the taking, it furnishes pictures in every way more satisfactory than the best of artists can make.

Not every one can go a-birding with the camera, but most people can go a-bug-ging with it. And if the bugs are gorgeous butterflies or regal moths, the result both as to beauty and interest is highly satisfactory.

Theoretically, the way to catch insects with a camera is to take it into the field with you, and expose upon them as they rest upon the leaves or flit from flower to flower. This is entirely feasible, and many good pictures may be obtained in this way. Such exposures, however, have of necessity to be short, and there are many things to interfere with getting the best results.

While some phases of insect life—such as the flight of a swarm of butterflies—are only to be taken by such outdoor exposures, more satisfactory results are to be obtained, in the great majority of cases, by bringing the insects to the studio, where you can better control the conditions of exposure.

The principal advantages you thus have are the control of the light, both as to intensity and direction, and the ability to use a satisfactory background. You also

are thus able to rear the insect through the different stages of its life, and get pictures of each phase of existence of the same individual.

Many successful photographs of insects have been taken by professional entomologists in insectaries which are practically simply glass-houses, with strong light coming from all directions. In such situations the exposures are very short, and it is comparatively easy to get pictures of insects in all stages. The light effects, however, are usually flat, and details of structure are frequently lacking.

I greatly prefer a very different sort of a studio, and have taken most of my pictures in a basement room lighted only from one side by comparatively small windows, which are so curtained that the light is easily controlled. This, of course, involves longer exposures, which in turn give greater detail and much more satisfactory results. One great advantage of the side windows is that the light effects are rounded rather than flat, so that the form of the insect or plant is more distinctly brought out.

There is also a decided advantage in utilizing a basement room, or at least one near the ground, especially in a building in which there are other occupants. The slightest movement of the specimen before the camera, spoils the picture, and I have found, even on the second floor of a solid brick building, that the slamming of a door often caused such a jar as to set the leaves of a plant in motion. There are always enough chances of failure under the most favorable conditions, so that one does not care to run this additional risk.

The length of the exposure will depend, of course, directly upon the light present. I should prefer a room facing the north, where the light does not vary so greatly through the changing position of the sun, but as yet I have had to be content with a room facing the east.

With the smallest stop and medium plates the average exposure is one minute, without the color screen. With the color screen, which is almost indispensable for red and red-brown tints, the exposure

must be four or five times as long. The best color screen seems to be the bichromate of potash filter, with which very satisfactory pictures may be obtained of such difficult colors as the reds and browns of many butterflies. I always use orthochromatic or isochromatic plates, and I find little advantage in using the color screen on yellow or green tints; while, of course, there is the obvious disadvantage of the prolonged exposure.

It is comparatively easy to get good photographs of the leaf-feeding caterpillars. Many of them feed mostly at night, resting by day in various characteristic attitudes. At such times they remain quiet for hours, so that one can focus and expose upon them indefinitely. Consequently pictures showing excellently the details of their structure may be taken; examples may be seen in the larvæ of the Polyphemus moth, the Io moth, and the Asterias butterfly.

By placing the caterpillars upon a plate of glass against a black background one may get such pictures as the one of the larva of the *Troilus* butterfly and that of the Elm Tussock caterpillars.

It is generally more difficult to get satisfactory pictures of caterpillars when feeding upon the leaves, but with care it may be done; an example is shown in the picture of the Spiny Elm caterpillars.

Many species of caterpillars construct for themselves habitations of various kinds. Like the nests of birds, however, these domiciles are exceedingly difficult to depict satisfactorily by any other method than that of photography. They are generally made of very minute silken threads, the effect of which any line of pen or pencil fails to portray. But, under favorable conditions, perfect pictures may easily be obtained with the camera. Such a home of the abundant American Tent caterpillar, at an early stage of its construction, is shown herewith. In the original photograph one can see distinctly the different layers of silk of which it is composed.

A later home of the same species is also shown; this is a terminal tent, made at the end of a branch, and the caterpillars are seen in their characteristic habit of enjoying a sun-bath. For these lowly creatures are very clever; they go inside their tents when it rains, but on sunny days they are likely to come into the open to bask.

The domicile of another web-spinner, the Cherry Twig-tyer, is also shown. This is a small, whitish caterpillar that feeds upon the leaves of choke-cherry shrubs, binding the twigs together to form miniature tents. As the caterpillars get older the twigs are drawn tighter and tighter, until at last they are as closely fastened as those shown.

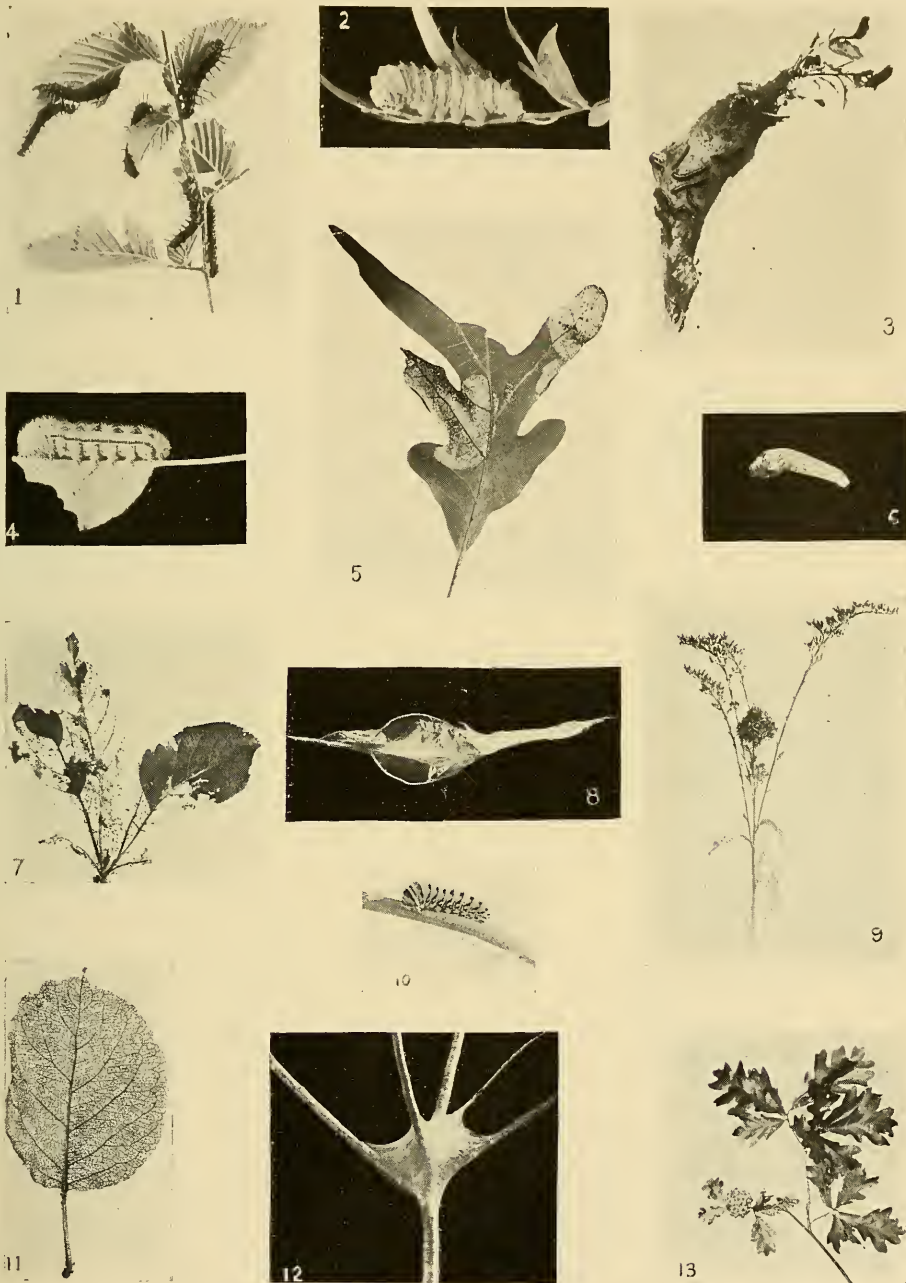
Both of the insects last-mentioned are builders of communal homes, but there are large numbers of caterpillars that live singly rather than in colonies, and these also often construct protections for themselves. The camera portrays such domiciles in a very satisfactory manner: For example, the larva of the beautiful *Atalanta* butterfly lives in nettle leaves, the edges of which it rolls up and binds together by silken threads. Such a leaf, after being opened to reveal the spiny caterpillar, is shown in the accompanying illustrations.

The peculiar plant growths called galls are among the most interesting products of insect energy. These are of many forms, and often of very curious structure. They are generally brought about in this way: An egg is laid on or in the tissue of a leaf or bud; it shortly hatches into a tiny larva which feeds upon the surrounding tissue, and by its presence causes the plant to develop an abnormal growth.

The strange thing about galls is that each species of insect causes a peculiar and characteristic gall, so that on a single oak tree there may be a dozen sorts of galls, entirely distinct in appearance, each inhabited by a different sort of an insect. In due time the larva within the gall becomes full-grown; then it changes to a pupa, and later again to an adult. Very often there are multiple galls, each containing many insects.

Galls are often so complex in structure that it is difficult to get satisfactory drawings of them. But this fact need not trouble the entomologist who uses the camera. Examples of these galls may be seen in the pictures of the multiple Goldenrod gall and the Mossy Rose gall.

In the case of many plant-feeding insects the injury done has well-marked characteristics which enable the entomologist to tell at once what species was at work, long after the depredators have disappeared. As a rule, it is difficult to



1. Spiny Elm Caterpillars Feeding.
2. Caterpillar of the Polyphemus Moth.
3. Tent Caterpillars on a Terminal Tent.
4. Io Caterpillar on Apple Leaf.
5. Oak Leaf Showing Empty Egg-Shells and Spaces
Eaten by Small Caterpillars.
6. Troilus Butterfly Caterpillar.

7. Apple Leaves Eaten by Older Web-Worms.
8. Work of the Cherry Twig-Tyer.
9. A Multiple Gall on Goldenrod.
10. Asterias Butterfly Caterpillar.
11. Apple Leaf Denuded by Young Web-Worms.
12. Nest of American Tent Caterpillar. Early Stage.
13. The Mossy Rose Gall on Oak.

represent such injuries by drawing or painting in a way that will enable one to identify them, but with the camera this is easily done. Take, for instance, the two pictures of apple leaves shown; they illustrate the work of the Fall Webworm, a caterpillar that builds unsightly nests on the leaves and branches of a great variety of fruit and shade trees.

When young, these insects feed only upon the green surface of the leaf, leaving such a network of veins as is shown in the first of the two pictures; but when nearly full-grown they devour more of the leaf-substance, eating out the smaller veins, but leaving the larger ones, as shown in the second picture. Now these are interesting and important phases of the life-history of this insect, and it is a decided gain to be able to illustrate them so vividly when one wishes to monograph the species.

Such a picture as that of the injured oak leaf also illustrates the same point: Near the center of the leaf, at the right of the midrib, are seen the remnants of a cluster of minute eggs, deposited there by a good-sized moth. In due season these eggs hatched into tiny caterpillars that ate the green surface of the leaf from day to day; their feeding-grounds are readily seen on each side of the egg-shells. But after feeding thus for a week they migrated to new pastures on other leaves, their work remaining as mute testimony to their presence.

If I were required to limit my use of the camera to any one phase of insect life I should choose the transition stages between the larva and the adult. For these stages are so brief it is difficult to get drawings of them, and the insect is then in such a condition that it is impracticable to preserve it satisfactorily. But with the camera one can focus upon a chrysalis about to disclose the butterfly, and when the insect comes out make a series of exposures that will give excellent pictures showing the curious process of wing development.

Out of my many negatives showing these phases of insect life I choose the one of the beautiful Mourning Cloak or *Antiopa* butterfly hanging to its empty chrysalis, with its wings fully expanded longitudinally, but not transversely. Notice how they seem to droop because the blood of the insect has not yet been forced

into all the veins to fix the wing membrane in its ultimate position. By comparing this picture with the one of the fully developed Mourning Cloak butterfly one can see the difference in the shape of the wings.

The most beautiful and, in many respects, the most satisfactory insect pictures are to be obtained by taking advantage of the fact that when a butterfly or moth becomes fully formed, after its emergence from the chrysalis, it rests quietly for about an hour to enable its tissues to harden preparatory to flight. During this period the insect is in a very docile mood. Place it where you will, and it will pose for you to your heart's content.

Unless disturbed it commonly spends this hour on or near the chrysalis or cocoon. Two such examples are shown in these pictures; one represents a side view of the beautiful *Cecropia* Emperor moth resting upon its cocoon, and the other a back view of the beautiful *Promethea* moth in a similar position, most of the cocoon in this case being hidden by the body of the insect.

With most butterflies and moths such a view as this last is rather difficult to get, as they commonly rest at this time with their wings closed, opening them only for very brief periods. Pictures of butterflies visiting flowers of various kinds may be obtained by placing the freshly emerged specimens upon the flowers which the species visit.

Sometimes one can get good pictures of adult insects brought to the studio from out-of-doors. The best way to do this is to bring them in at least a day before you wish to photograph them, and surround them with as natural conditions as possible. Thus they become so used to the new environment that they will remain quiet when you make the exposure.

Sometimes, on rainy days, you will find various sorts of wasps and bees resting quietly under the shelter of flowers. By careful handling, these may be brought to the studio and pictures secured.

One of the most successful photographs I have taken of an insect not reared in captivity is the crane-fly. It looks like a gigantic mosquito, and is common in meadows and near water courses during summer.



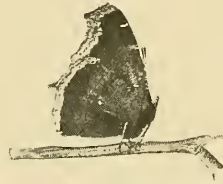
Side View of Cecropia Emperor Moth Resting Upon Its Cocoon,



Back View of Prometheus Moth Resting Upon Its Cocoon,



Side View of Mourning Cloak or Antiopa Butterfly Hanging to Its Empty Chrysalis with Wings Just Expanding.



Side View of Mourning Cloak or Antiopa Butterfly with Wing Fully Developed.

These camera studies of living insects require patience and perseverance for successful results. It is a comparatively new field of photographic activity, but one in which the naturalist will be richly rewarded. It seems cer-

tain that future books on insects will be illustrated chiefly by means of the camera, so that entomological literature will have a new and fresher interest to every one who loves even the ephemeral things of the outer world.



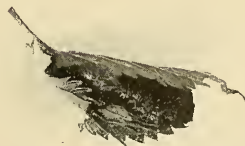
The Crane Fly.



Nettle Leaf Folded by Caterpillar of the Atalanta Butterfly.



The Lima Moth.



The Atalanta Caterpillar in the Opened Nettle Leaf.

AFTER ELK IN COLORADO

By Hamilton Wright

ROUTT County, Colorado, embraces one of the best hunting districts in the United States. Shut off from the advances of civilization by high and almost impassable mountain ranges and limited in its value as an agricultural territory by reason of deeps snows which cover the earth sometimes to a uniform depth of four feet or more for six months in the year, it has become the summer pasturing ground of vast numbers of black-tailed deer and antelope, and many elk, who seek this remote and inaccessible district to avoid persecution near the railway lines by the tourist and pot hunter. Here the doe repairs to bring forth her young, and the stalwart bucks hide themselves in the tall timber of the mountain ravines while their horns are in the "velvet."

So abundant do the deer become in this region that upon their departure, at winter's approach, for southern climes or lower and warmer altitudes, pot hunters and Indians will kill enough game along the runways in a couple of nights to provide their winter's meat. The elk frequently herd up all winter in some thickly wooded ravine where they "yard" down the snow and browse upon the bark, buds and leaves of the quaking asp and spruce tree.

Early in the autumn of 1898, a party of three of us, the Doctor, the Hunter and myself, pitched camp on Mad Creek, 212 miles from Denver by wagon road, 80 miles from Wolcott, the nearest railroad point, and 20 miles from Steamboat Springs. We decided to make the camp at Mad Creek our headquarters in that section.

The day after our arrival the Doctor and myself left camp with a pack mule and climbing a number of precipitous gorges and ravines, arrived close to the summit of the Rabbit-Ear Range, not far from timber line, where the trees were tall and hung with moss, and the air bitter cold, although it was but in the latter part of September. We built a large camp-fire, hobbled the mule by three legs and warmly blanketed it, and turned in under our blankets. Flurries of snow

started, which before dawn turned into a warm drizzling rain. It was a fine morning for hunting elk, as rain drowns the noise and all wild animals appear to be rendered much tamer by its influence, so the Doctor and I started forth over a plateau with undulating thickly timbered ridges and grass-covered pampas-like draws. We followed up one of these draws, in which the thick timber ran out on either side like points of land running into a lake. These points were quite regular and dove-tailed perfectly with the intervening broader portions of the draw.

An hour and a half of plodding through the wet grass brought us to the end of the draw into some pretty thick timber, and we had about concluded to go back having seen no sign of elk, when I heard a soft crashing in the small timber ahead, and there on the top of a little rise not sixty yards from us, partly submerged in the bushes but yet clear from the forest, rose a gigantic elk. He was an unusually fine specimen. His horns spread out with kingly magnificence and he seemed entirely unconscious of our approach.

The Doctor, who was an old hunter, made signs to me to shoot in concert with him. As soon as the smoke cleared away we saw that the elk had disappeared, but we could not find any trace of it, nor could we find where our bullets had gone or hear it running. After examining closely for twenty minutes we made a wide detour, when the Doctor discovered its tracks leading up toward timber line. It was evidently running on three feet, being crippled, as was afterward discovered, in the right hind leg by a shot through the groin. The ground was wet and it had not yet ceased raining, so it was exceedingly difficult to follow our quarry.

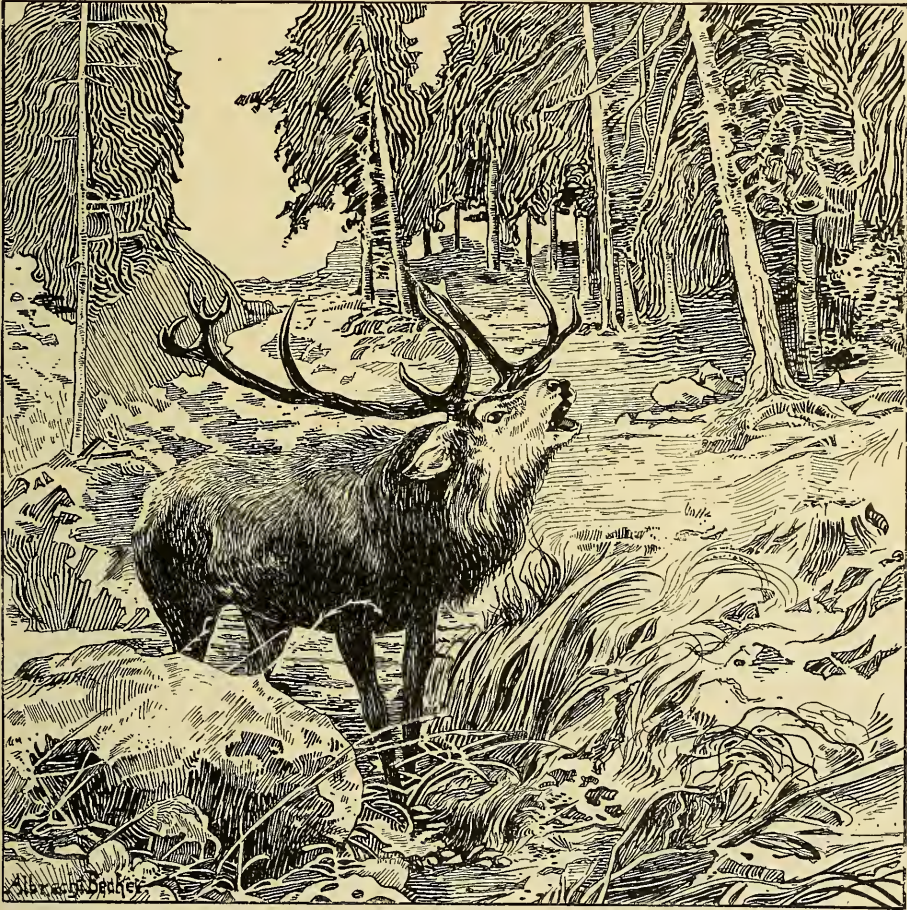
When an elk has been shot but not seriously wounded he will usually start off like a locomotive engine and run clear out of the country. So we judged this fellow was pretty badly put to, although, perhaps, by no means mortally wounded. Upon closer examination of the spoor the Doctor gave the verdict that the animal

was stopping from time to time, perhaps to watch us, but the light was poor.

Sometimes we lost the trail in our eagerness, then catching it again, would rush headlong through the brush, over logs, windfalls, down hog backs, into ferny dells, where the thick grass made the trail hard to follow, then into an open draw or through the thick spruce timber. A warm drop of blood upon the leaves, a broken

animal immediately wheeled and ran about a quarter of a mile into some tall timber on a hillside. I crept up in a half-circle, much afraid I would lose him in the trees, but ran almost on to him and put the magnificent beast out of his misery. We took a good photograph of the elk, and after dressing him, pitched camp for the night.

After the first week of our camping



The Challenge!

twig, a bended branch, showed our game was sorely pressed.

We followed the trail for about two hours in almost a complete circle, when we saw the elk stop to rest and hide in some quaking asp trees very near the spot where our mule was tethered, giving me a clear long-range shot at about 450 yards, and I hit him in the groin. The wounded

on Mad Creek had passed away, the Doctor and myself concluded to make another sally after elk. Conventions among the few ranchers and prospectors in this portion of the country, as well as the game laws of Colorado, forbid more than one deer or elk being found in camp at one time. Those rules we were minded strictly to adhere to. Another

time-honored custom which we had observed, was to share a saddle of meat with the nearest rancher, who, luckily enough, happened to be our friend, Turner, and he volunteered to guide us to the "Flat Top" mountains, near the Craig River, some thirty miles away.

The "Flat Tops" are a series of thickly wooded hills from 8,000 to 10,000 feet above sea level, with an occasional peak running above timber line and covered well with snow throughout the year.

The next day we spent in a wild climb up ravines, gorges and brush-covered hog backs. Frequently the thick timber and fallen trees barred our progress and it became necessary for us to act upon the maxim that the longest way around is the shortest way there. It was several days, however, before we discovered any elk sign, which we found finally way up in the mountains near timber line, far above the usual range of the black tail. There were indications that a large body of elk had been recently pasturing in the vicinity, and as the signs were about two days old, we immediately got in marching order. Progress was slow and difficult; pines, firs, spruces, miles and miles of tree-tops seemed to bar our way. The elk went lower and we came into the easier traveling of quaking asps, cottonwoods, live oaks, juniper and buck brush, rich coarse buffalo grass and wild grain, and an occasional piece of pine forest following the long slope of a hillside. But we never came up with the game, so we moved on our camp to a more promising site.

After two days of travel Turner, our guide, announced we were close to a "considerable" bunch of elk, and we camped at nightfall in a little draw. Two big elk came lowing out of the forest to drink in a stream below, but it was too dark to take any chances in shooting at them.

Long before light appeared next morning we broke camp and were ready to begin the quest. Coming over a little rise of ground we startled a bunch of about eight black tail, five does and some small bucks. They were so tame that, had we wished, we might have annihilated the entire bunch. However, we kept steady to the main chance, as we did not wish to scare the elk.

We soon discovered our elk, which

were in an unusually big bunch of about sixty, not half a mile from where we had pitched camp. They circled at first on seeing us, then ran in lumbering fashion into the timber. Turner raised his rifle, firing into the bunch, and brought down a good buck with a 45-90 well placed behind the shoulder-blade, while the Doctor and I spurred our horses and went half a mile straight up hill at as hot a pace over the rough country as our horses would stand; then into the woods. We felt nothing could be gained by following the bunch up from behind. We heard the guide's gun several times below us.

After an impatient wait a couple of doe elk slid out into a little clear patch. Then the rest of the bunch came wallowing through the brush in file. It was an unique spectacle to see those noble animals come out of the great blackness of the forest in intelligent and orderly manner. An old doe was in the lead and almost the entire bunch followed her rapid pace directly towards our position in the brush. Their movements were free from any confusion. The ease and speed with which they came through the forest recalled the movements of a body of cavalry.

The elk seemed to get wind of us at about one hundred yards distance, for they turned a sharp right-angle and plunged again into the heavy spruce timber. Now was our opportunity! My heart beat high with excitement. The Doctor and I singled out a huge elk running at about one hundred and sixty yards as worthy of our united effort, and our shots brought him down.

At the reports several more elk ran out of the brush and followed up the main body. We had several other opportunities for a shot, but as this was all the meat and heads we could dispose of, we brought our game together and photographed it. The remainder of the day was spent in preparing the heads for packing to Steamboat Springs and jerking the venison which the guide wished to use for his winter's meat. The next day we left for the camp at Mad Creek with three magnificent heads.

Our party enjoyed the lovely Indian-summer weather, although the nights were extremely cold, and we realized that at any moment we might be shut in for weeks by a heavy fall of snow.

A SYMPOSIUM OF FOOTBALL*

EVOLUTION IN TACTICS AND PLAY, BY WALTER CAMP, YALE, '80

DEVELOPMENT OF THE KICKING GAME, BY GEORGE H. BROOKE, PENNSYLVANIA, '98

A MANUAL IN PUNTING, BY PERCY D. HAUGHTON, HARVARD, '99

THE PLAYER'S HARNESS, BY CHARLES CHADWICK, YALE, '97

METHODS AND DEVELOPMENT IN TACTICS AND PLAY

By Walter Camp

AMERICAN DEVELOPMENT OF THE ENGLISH GAME.

WHEN football in its proper form was wholly unknown here, it was an old story at Harrow, Rugby, Charterhouse and Westminster. Football in the United States previous to the 'seventies, can be dismissed as having no semblance to the modern game. In the 'seventies a sport something after

was lukewarm, and not until Harvard visited Canada and there learned the possibilities of the Rugby Union sport, did it really assume any special prominence in college athletic affairs.

Harvard introduced it among American colleges by playing a compromise match with Yale in which the rules of Rugby Union and American Association were hopelessly mixed. But the next

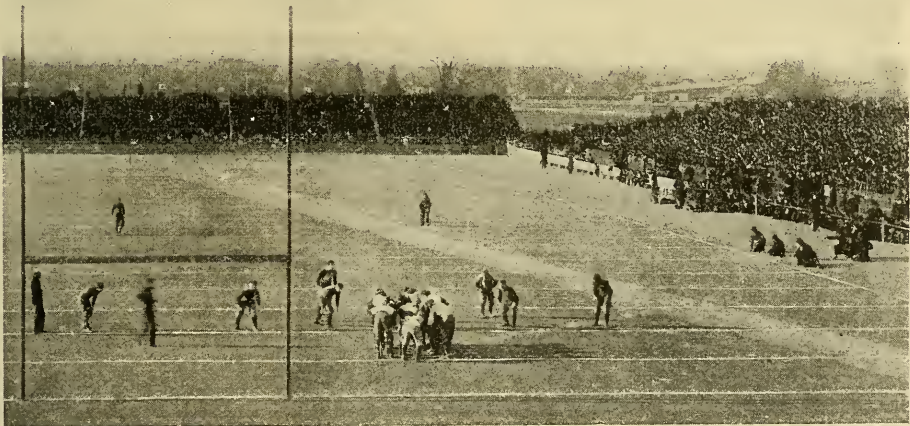


Photo by Pach Bros., N. Y.

Wedge Formation at Kick-Off under Old Rules.

the order of English Association football was played. But the interest in it

*These articles have been written with the view of instructing the present player no less than entertaining the old, and more capable men could not have been chosen. Mr. Camp was one of the early sponsors of American football; Mr. Brooke was one of most skilled all-round kickers; Mr. Haughton the most expert punter; and Mr. Chadwick among the most stalwart guards the game has yet developed.—Editor.

year the Rugby Union rules were adopted in their entirety, and from this point begins the interesting history of American college football.

This adoption of Rugby Union took place in the fall of 1876, and it must be remembered in this connection that no mat-

ter how old the game of football may have been in England, it was not until comparatively recently, even there, that the possibilities of the sport were really recognized. It was not until 1871 that, at the request of Scotland, the number on the team was reduced from 20 to 15. Even then the short passing now recognized in England was not indulged in to any extent, and, in fact, it was the Oxford team of 1882 that first really developed this feature of the English play. Hence those who look upon the development of the American sport as something untraditional, and advancing outside the canons of good old English Rugby Union, should remember that the game, even in England, although progressing much more slowly, has made very definite advances in the last twenty years. The only difference is that the American, being governed so little by tradition, has blazed his way more rapidly and with more freedom towards unusual developments.

POSITION PLAY AND SCRIMMAGE.

When Harvard and Yale played their match in New Haven in the autumn of 1876 such positions as that of tackle, end-rush, guard and snap-back were unknown. In fact, the quarter-back was not even known. The teams were divided as were the English teams into forwards,

crude discoveries that the ball might be pushed out with the foot and thus enable the half-back to seize it, but such a thing as a definite play of this sort had not been developed, and the principal tactics consisted in punting the ball, running with it, and some erratic passing.

By the end of the season the possibilities of the game had begun to dawn upon players in both institutions. It was manifest that for a crowd simply to get around the ball and kick indiscriminately and let it roll out where it would, did not at all suit the American's idea of order and preparation, and, as stated above, even before the time of this big match players were at work devising means whereby, instead of kicking the ball through, their players could kick it to one side, and thus get it out of the scrimmage to their own half-backs.

This same tendency later developed among English players, and is represented in Canadian football, another outgrowth of the English Rugby Union, but is there known as "heeling out." At this time the American had no more idea of what is now known as interference than had his English cousin, from whom he adopted the sport. It was just as much contrary to the rules and their interpretation, in this phase, for an American player to get between a man running with the ball and the man in front who was about to tackle him, as it would have been on English fields.

But this condition of affairs did not last long. As soon as there came the development of the quarter-back play, namely, snapping the ball back with the foot (for that is the way in which it was originally performed) to a player behind the man in the center of the rush line, and that player or quar-

ter-back passing it to some one back on the line, it dawned upon American players that to stand in their positions in the rush line and not let the opponents break through was a most admirable assistance to give to their half-back who was about



Running with Ball After Touching In from Side Line.
A Familiar Play of Years Ago.

half-backs and backs. In the scrimmage the ball was placed upon the ground and the rushers of both sides crowded about it and endeavored to kick it in the direction of the opponents' goal.

Both teams soon made some rather

to run with the ball. At first they did this rather gingerly, but soon the practice grew until men were actually wrapping their arms about their opponents in order thus to give their half-back a better chance for a run. It was not until this period of the game had been reached that the American player had really felt any particular sense of responsibility for the development of his own American game.

About this time there came up the further development of individual positions, and especial duties were given to the men on the ends, to the tackles, who were then called "next to the end," to the center and to the guards, who were then known as "next to the center." In a year or two the specific names "tackle" and "guard" were applied as they are now.

Previous to this there had been no rule requiring the side to advance a certain distance or surrender the ball, and this weakness had given rise to the introduction of what was known as the block game, that is, a side indefinitely retaining possession of the ball while making no advances into the enemy's territory. When the five-yard advance rule, which is now familiar to every football player and spectator, was first proposed, it had no adherents save the man who proposed it. But finally, after a long argument, it was adopted tentatively, until October of that particular year, and at that time was formally ratified.

Then the over-development of off-side interference became threatening, and after considerable discussion and some very close votes, the legislators determined that players of the side having possession of the ball could obstruct the opponents with their bodies only, not by the use of hands or arms. This was at first rebelled against vigorously, but was soon made effective.

ADVENT OF FORMATION PLAY.

Such in brief was the early progress of the adopted Rugby Union in this country. As for the plays, methods and formations, these show a particularly interesting development. There was absolutely no method about the play in the early days of

Rugby Union as played at Harvard and Yale. When a man got the ball he ran as far as he could and then had it down. He got the ball as often as he could, and nobody knew who was going to get it. Sometimes just as he was tackled, or just



Former Method of Snapping In Ball with the Foot.

before he was about to be tackled, he would pass the ball to a fellow of his side near at hand. But in two cases out of three this resulted in his losing the ball and an opponent securing and running off with it.

The first distinct development of the play was that of passing the ball out to the quarter, who then fed it to his halves as he thought best. Then came some subdividing of the duties of the men in the forward line, so that certain ones of them would run down the field under a kick, while others blocked the opponents; and finally, a little later, the development of off-side interference in the nature of holding in the rush line. This, while an infringement of the spirit of the rule, was really the beginning of the notion of assistance to the runner, which has now taken on the form of legitimate arrangement of players into groups having protecting flanks behind which one or more runners may advance.

This brings us up to the point of development in the game when tactics, as they would now be called, might really be said to have commenced. Up to this time Yale had had much the best of all the other colleges, in that in the majority of cases the first steps in advance toward the development of the positions or of a particular

play apparently emanated from New Haven; and because of this her teams seemed to be about a year in advance of their opponents. But now began at various universities certain specific developments which seemed to have independent origin. At Princeton there grew up a special ability on the part of rushers to get quickly through the opposing line. In fact, for three or four years that was a distinguishing mark of Princeton teams. They seemed to do this by going through in a knife-like manner and with tremendous power and dash. Then came at New Haven the development of the position of guard and his use (instance, especially, the case of Heffelfinger) as an interferer in assisting the half-back in running around the end.

ADVENT OF THE TACTICIAN.

About this time Harvard had been developing special plays, but the groundwork and detail of position had been manifestly neglected, so that teams had not made the showing that the University's numbers and position in other sports would warrant. Then came the advent of the true tactician on the football field in the person of Mr. Deland, of Boston. Up to that time certain formations had been made by teams, and those formations had been useful in advancing the runner or the ball, but they were very crude, and most of them entirely dependent upon a simple wedge formation into which the men assembled themselves either just before the ball was snapped or immediately upon its being snapped.

Mr. Deland introduced a practical and new theory in that he determined to get a certain number of men into rapid motion, and with that body make an assault upon the opponents, who, either restrained by rule, or fearful of committing a mistake, were obliged to remain almost motionless, and who thus were unable to meet with effective resistance such as an onslaught. This theory he developed into what was known as a "flying wedge," and although Yale

defeated Harvard that year and the following year when these plays were at their best, the success of Yale was due more largely to the self-reliant calmness and steadiness of her general play, and her thorough perfection in detail of each position than to any other cause. Certainly the tactics of the Harvard team were superior.

Not long after the advent of Mr. Deland a new football tactician came upon the field in the shape of Mr. Woodruff, formerly of Yale, then of the University of Pennsylvania. He developed the drawing back of one or more heavy men from the rush line and using them both as men to run with the ball as well as for interferers in protecting his other runners. Another step of his which preceded this and was of especial interest was the "flying interference," in which part of his men ran across the field behind their own line, reaching the opposing end and tackle in advance of the runner, and thus doubling up the number of interferers as well as giving added momentum. This play, however, speedily gave way to his further development of throwing the heavy men back of the line, in which he has done such remarkable execution.

At the same time that Mr. Deland was devising these plays at Cambridge, and Mr. Woodruff his special plays at the University of Pennsylvania, Yale was developing a play between the end and tackle, whose particular strength consisted mainly of the sharpness of turn which the runner was able to make and the change in the direction of his interferers. This was the play by which McClung made his remarkable runs, and

which really for two or three years was the *bête noir* of Yale's opponents. This and the short wedge on tackle and guard, by which Butterworth found his way through opposing lines, both had an advantage for Yale, in that they were in no way spectacular, and hence did not attract the opponents' attention from what seemed to be the perfect simplicity of the play.



A Tackle, when Tackling below the Hips, Was Illegal.

Princeton at about this period had made the most of the position of end rusher, and was using that in conjunction with heavy work in the center of the line to perfect a style of play which involved the starting of the half-back, or end, from his own side of the line and crossing over with a rather long swing, with the assistance of even his own tackle, making a round-the-end play with a very heavy mass interference. This play in its effect was not very unlike Mr. Woodruff's swinging interference, but was rather slower of development and far more compact when it reached the end. It was this which proved so disastrous to the Yale team in New York, and also to Harvard at Cambridge.

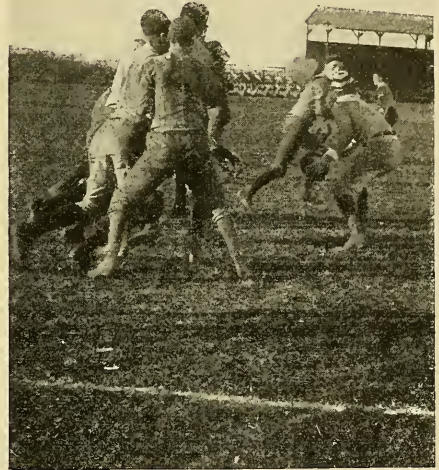
MIDDLE-WEST AND WESTERN PLAY

Passing now from the East to the West, Mr. Stagg, of the University of Chicago, developed more trick plays than almost any other man who has ever been connected with football. The concealed ball, double passes, and even triple passes and criss-crosses, were especially dwelt upon by this strategist. These plays had rather gone out of vogue in the East when Mr. Stagg journeyed westward, and it was not until the visit of one of his teams to Philadelphia where, with the assistance of Herschberger, the phenomenal punter, it made a most excellent showing, that interest was once more aroused in these fancy plays. Mr. Stagg's team was not successful in winning the game, but very certainly raised the standard of belief in middle-western football prowess. Other visits and interchange of matches strengthened the reputation of the Middle West very materially.

Meantime, thanks to Messrs. Stagg and Herschberger, kicking was being brought forward more strongly in that section than it was in the East, and at the time of Herschberger's visit on the Chicago team there was no doubt of his ability to outpunt any man of the Eastern teams, as well as outdrop and outplace him. It is fair to say that it was this stimulus which hastened the advance in kicking methods in the East.

In the Middle West, O'Dea, of Wisconsin, followed, and was for a time matched against Herschberger, and the two were a marvelous pair, so far as kicking was concerned.

Still farther West, on the Pacific Coast, an early visit of Eastern coaches did much to help the sport in two ways. First, in introducing methods of play that were up-to-date, and, second, and more important, introducing ideas of sport separated from that of the professional. Ever since that first journey of Eastern coaches to the Coast, there has never been a year when one or both of the principal teams, Berkeley and Stanford, has not been coached by Eastern players, and something of an idea of their ability and understanding of



A Long Pass in the Days When the Ball would Sometimes be Thrown Half-Way Across the Field.

the game can be gained from the fact that the Carlisle Indians, who had made such an excellent showing in the East, journeyed out there last Christmas, and were only able to secure a victory by two points, a single safety touch-down having been made by the University of California.

THE GAME'S POSSIBILITIES.

But to return once more to the East and the development of the game in the last three or four years. The time had come when the game must be rounded out to a better fulness or else progress would cease, and it is perhaps fairest to say that Princeton aided most in this all-round de-

velopment at the time when Baird came to the front there by doing such excellent punting. It was with him as a kicker that Princeton made such a remarkable showing, in the year when she defeated both Harvard and Yale. It is true that, although her kicking game was the main instrument of Harvard's defeat, Yale was able to block that kicking game through the ability of her rushers to get through the line and reach Baird before he could get the ball away. But Princeton's long end-mass interference won the day for her, and the possibility of her kicking game was sufficiently attractive to make all the other teams see the necessity of developing that side of the sport.

For the last few years nothing especially new in the line of the running game has come to the front, but decided advances have been made in punting and drop kicking, and especially in the management of the kicking game. Last year in one of the most important matches of the season, the Yale-Princeton game, two as phenomenal drop kicks were made as have ever been seen on any field, and that, too, under the nervous strain of a contest of the greatest importance.

Recent coaches have confined themselves principally to the more important development of general all-round play rather than to designing special tactics, but there are several who have shown an especial ability in original lines, among them Mr. Sanford, of Columbia, and Mr. Warner, of Cornell. The latter coach introduced a play dependent upon bringing all the rushers over to one side of the ball, and thus securing a most massive interference when the ball was started. He worked this with the Indians successfully last year upon several occasions, and it was as spectacular as the Deland flying wedge. For all that, the more recent progress of the game has been pretty distinctly along the lines of better general development and perfection of all points of the game rather than in tactics.

A team with first-class end rushers, one or two good punters, and an ability to deceive the other side as to when the kick is to come and where it is to come, need not consider more unique plays. But no team can afford to leave the strategy of the game so undeveloped that the opponents find that they need to watch but three men only, and those three men always sta-

tionary in the most convenient place for them to be followed. It is not necessary to have striking plays, but it is necessary to have plays which deceive opponents and which also admit of getting at least five men into the interference with a fair measure of certainty.

No team can afford to invite the attack of the opposing forwards upon their two half-backs and back, and do this indefinitely, because human nature and human strength cannot stand it. For this reason it is necessary for a team, no matter what its pluck or strength of commanding ability, to have some certain methods of play which, while not perhaps every time deceiving the opponents, shall nevertheless conceal, until the last moment, the point at which the assault is to be made, and, as far as possible, the man who is to be the final recipient of the ball. A team with a few such plays, and a kicking department well developed, will have its attack in good, aggressive form, and will be sufficiently serious to menace even the best defensive teams.

There is one point which has not been treated of at length in this article because space does not at this time permit, and that is, the defensive play. Quite as important as the attack, and far more difficult to perfect, it is a part of the game upon which little has been written, and outside of the coaching staff not very much except some few general rules is known. The problem that confronts a coach who has to develop the defensive ability of a football team is a most perplexing one, but it may be outlined in a few words as a sort of conclusion to this article.

In the first place, special lines of defense adapted to special known plays of opponents may be interesting and at times effective, but they have little to do with the main body of defensive play. This depends upon laying out a system in which each man shall be called upon to move as short a distance as possible from the place at which he is stationed in order to cover the ground to the circumference of the circle that his comrades on either side have in charge. Then having determined upon this, to so plan as to be able to give weight to certain weak points if they are unduly menaced. Finally, to so protect by second lines of defense the weakest spots, that an error may not prove irretrievable.

DEVELOPMENT OF THE KICKING GAME

By George H. Brooke

ALTHOUGH American football sprang into existence as an offshoot of the ancient English Rugby game, there is at present very little real resemblance between the two, farther than in similarity of the balls used. Undoubtedly the prolonged hurry-scurry of the British game is conducted with much method, but our college football can be more closely likened to a mimic battle than any other sport the world over, in that it gives a greater opportunity for the display of strategy in both combined and individual movements. Our rival forces pause after each play and plunge again into scrimmage with an ever-new and preconceived plan of attack or defense. The English game is nearly, if not wholly, an unbroken kicking game. In America we have a much more diversified style of play, and kicking performs but one highly interesting and important part in the general plan of football tactics. Instead of holding a rather monotonous prominence of its own, it lends spectacular variety to the rest. We like it the better for this reason.

Almost any one of the ever increasing number of football enthusiasts who annually watch the great contests of our college elevens, can easily see and appreciate the fact that an extra long punt, a clever drop, or a muffed kick ever turns the tide of battle; but few realize the finer points in the art of kicking, its latent possibilities and its clear-cut position in football strategy.

In the very early days of American football, when the players starred it on the gridiron in canvas jackets and tights, kicking flourished greatly. Bull and Moffat performed some wonderful feats of drop kicking, and Watkinson, Graham, Thompson and others were not far behind them. But with all due respect to their remarkable prowess, it must be said that conditions were exceptionally favorable to them. The ball then in use was much bigger and rounder than the slim, spherical little affair now made, and, therefore much easier to kick accurately. Furthermore, they had "time to burn" in getting off their kicks.

Next came a period when far stricter rules and a rigid enforcement did away with the holding and straight arm blocking of the first period. Combined methods of breaking through were invented, and the kicker was often hurried out of all semblance of that nice accuracy that a second or more of time allowance would



Photo by Jennings & Sawyer, Phila.

Beginning of Straight Punt, Before Ball is Dropped on Foot.

have made possible. Drop kicking well-nigh died a natural death, and frequent blocked punts marred the beauty of the game. A host of good kickers, Butterworth, Homans, Thayer, King, Bagley and others represented this period. They possessed all the natural ability of their predecessors, but were heavily handicapped by this fatal uncertainty in the element of time.

In '06 and '97 the clever time-saving scheme of having the center rush snap the ball directly to the kicker came into vogue. This has brought the conditions for kicking back to their proper adjustment, and development in all branches has taken on a new life. Successful drop

kickers are coming forward in all of the colleges, and the "whirling punt," which requires time, and the "placement kick," a newer departure, are now regularly and successfully used.

There are three varieties of kicking, the punt, the drop and the place kick. The latter two are not so important as the



First Position in the "Whirling Punt."

punt, because they are not as commonly used, are much more easily mastered, and are never counted as sure factors in the winning and losing of a game. The cunning toe of a Hudson or the brilliancy of a Poe may turn the tide of victory at the last critical moment with a goal from the field, but the punt leaves its mark on every fluctuation in the course of play and paves the way for both touchdowns and field goals. The drop and the place kicks require great dexterity and coolness, but their objective never varies—the goal posts are always there—and the kicking of them is simply a matter of getting close enough to the goal, a result depending on the ability of the kicker. Unlike punting, they play no important part in the general strategy of football. In drop kicking the ball is usually let fall with a slight forward tilt, and success depends almost entirely upon the adroitness with which the ball is hit the very instant it rises from the ground. A fraction too late or too soon means failure. The "placement kick," in which the snapped ball is caught by the quarter and held for

the kicker, rivals the drop, but I doubt if it will ever displace that time-honored and graceful play.

When we come to consider punting, we are fairly and squarely launched into the tactics of football. The part it plays in the winning or losing of a game is so important that no coach can afford to neglect its careful cultivation. It varies with every shifting scene of the battle, and either fluked or blocked punts are likely to result in a humiliating touchdown; or an error in height, distance or placing may lose all the hoped-for advantages.

The good punter must be endowed with the ready wit and steady coolness to realize and to seize every opportunity offered by the poor judgment of his opponents or the clever strategy of his own side. Above all, he must know thoroughly well what he can do, and then confidently proceed to do it. Kicking at random is like firing heavy shot over the heads of an enemy. Every punt has its objective possibility, and the more the kicker practices to attain this, the more efficient and useful will his punting gradually come to be. One of the greatest advantages which we Americans claim for our game of football is that it cultivates the practical qualities of the brain. The art of skilful punting certainly illustrates the justness of this claim most clearly.

Football is divided into attack and defence. The attacking side is allowed three tries, called "downs," to advance the ball a total of five yards or more. If, after two trials, such a result seems improbable, then the punt is used to send the ball as far away from goal as possible before the kicking side goes on its defence. This is the simplest use of the punt—converting it into a last resort. It is the kindergarten stage of football development. Modern methods give punting a far higher position in football strategy. Its great ground-gaining possibilities are now realized and developed, but not even yet to their highest extent.

The first object of punting is to get the ball out of dangerous territory, or that close proximity to goal where a fumble or a foul might give the ball to the other side within easy striking distance of goal. Many a game has been lost by a neglect of this common-sense rule of play. The second object is to gain as much ground as possible by the punt. The expert kick-

er will remember that the mere sending of a long kick down the field is not gaining ground. He will keep in mind the possibility of passing the opposing backs by sailing the ball over their heads or out of their reach. If this is improbable, he will endeavor to do two things: First, to kick as far and as high as he can without sending the ball beyond the reach of his ends, and second, to do it in such a puzzling manner that the opposing players will be likely to misjudge and to muff the ball.

The placing of kicks can never be depended upon, but it is much easier to pass one man in the back field than two. If the ball is sent over his head or past him, it may roll for a great distance and actually change the fate of the game. If an eleven is drilled for quick work, it can surprise the other team by an unexpected punt. The results of a rolling kick are so decisively important that I am always surprised to see a team foolishly floundering into scrimmage when time and opportunity are ripe for this play. If the field captain waits till the third down, his chance is gone, for the rival leader then expects a kick and sends two men back to handle it.

The rather surprising success of quick and clever players in running back kicks last autumn was due to lack of judgment on the part of the full-backs. Owing to the time-saving method above mentioned, the ball can be gotten away very quickly. This possibility was not taken into their calculations, and very often the ends were left far behind.

As a matter of fact, the probability of passing generally is very small; hence, in order not to outkick the ends, the ball should be usually raised very high into the air. This species of punt is more difficult to judge and to catch, and a good pair of ends are always down on it, ready, either to hold the ground gained or to pounce onto a muff. In a certain sense, it is an endeavor to gain ground on the kick without losing the ball.

On this same principal is the quarter-back kick. The quarter-back punts the ball to one side and slightly over the line of scrimmage. If it is well placed, the three backs who have run out, keeping on side, have an equal if not better chance than the opposing team to secure the ball, thus putting a first down to their credit.

The quarter-back kick, when first used, met with signal success, and is still very practicable.

Thus we see that there is an objective possibility for every kick. The ball may go over the heads or out of the reach of opposing backs and roll for a splendid gain. It may be caught, but at the very instant of the catch the ends will arrive to save the gain. It may be muffed, and, the ends being there, they will not only secure it for a first down, but may even rush it over the goal line in a free field.

The kicker is a part of a team. The most perfect exhibition of extremely long kicking may result in pure individualism. Herschberger came out of the West and showed the Eastern cracks magnificent punting for distance. But a Daly or a Hutchinson would have caught his might-



Finish of the "Whirler."

iest effort, and then, with an unobstructed start, have cut down the gain anywhere from ten to fifty yards.

We now come to a short discussion of the kinds of punts best adapted to meet all requirements. The long, low, straight punt is best fitted for driving the ball over the heads of the backs, because it can be

gotten off quickly; it goes harder and swifter, it rolls farther after striking, and, if necessary, it is more easily placed. The very high punt gives more time for the ends and is harder to handle. This kick, however, must usually be made to cover from forty to forty-five yards, and its ef-



First Position in the Drop Kick.

iciency depends upon the height to which it is sent while attaining a good length.

Our most celebrated full-backs have varied somewhat in their styles of punting, but the differences have been more seeming than real, and in most cases unimportant. There are certain fundamental rules applicable to all good punting, and any neglect of them is certain to prove disastrous to success. The first and main object is to cause the ball not only to fly in such a manner that the air will not only least resist its flight, but, on the other hand, will be made to serve as a counteractive force to the attraction of gravitation. The solution of this problem is the key to good punting. The movement of the ball must be smooth and regular. Any half-breed methods will cause it to wobble and to "fight the air" so that the strongest blow will be powerless to drive it to any reasonable distance.

There are two distinct methods of good

punting, the so-called "straight" punt and the so-called "whirl-er." The former is especially adapted to the production of the long, low, swift drive, and the latter to the very high one. The mode of kicking varies distinctly in each case, and it is because this contrast is not realized that but one player out of seventy-five makes a first-class punter.

In the "straight" punt the ball is hit squarely on the end with the extended instep. It is set spinning flat on the air—a line through its ends would be parallel to the earth—and it sails along in this position until the end. The so-called "whirl-er" is the acme of the art of kicking, and it takes months, and, I might say, years, to master it. The ball is struck or cut on the side and just back of center with an extended instep, and rotates like a rifle bullet on the axis of its ends. The swing



The Act of Kicking the Drop Kick.

of the leg is perpendicular, and the ball is met directly in front of the body. The first part of its flight is straight; then, as the spin lessens, the movement becomes more and more subject to air currents, and the latter end of its flight is so uncertain as to make it exceedingly difficult

to judge. This ball can also be kicked much higher than the "straight" kick.

The ideal punter of the future must be a master of both the "straight" and the "whirler," and must possess an instinctive judgment which will tell him when to use the one or the other, and with this the coolness to execute with certainty and precision.

It has become the custom to assign the drop and place kicking to different players, and, while this plan may result in giving each player more time to practice his particular style, yet, on the whole, I should say that it would be better for one player to execute them all. Cool judgment and a perfect union of eye and foot are essential to all successful kicking. These are best acquired by practice in games, and this sort of practice is necessarily somewhat limited.

The slim, spherical shape of the modern ball increases the possibilities of long distance and high punting to a great degree while it lessens the certainty of place and drop kicking. The small surface of the ball reduces the resistance of the air, but also presents a smaller space for the accurate blow of the foot.

I have heard it said that a first-class kicker is born, not made. True it is that our best full-backs have nearly all possessed a certain knack only characteristic of the all-round athlete, but a look into their school and college careers will show that they were self-made in the best sense of the word. Long-continued, diligent and common-sense practice made them, and this is as necessary to the art of kicking as to any other accomplishment which requires the like degree of subtle dexterity and skill.

A MANUAL IN PUNTING

By Percy D. Haughton

SINCE the "flying interference" and "momentum mass plays" were abolished, and especially at Harvard, Yale and Princeton (Pennsylvania still holding to set rushing tactics), there has been rapid development in kicking. Nowadays a team usually begins by testing its opponent's kicking, this practice being continued until the ball is secured within striking distance—usually thirty to forty yards of the enemy's line—when rushing tactics are relied upon in a final attempt to score.

But in order to gain this coign of vantage one must employ the best kind of punting. By this I do not mean brilliant and erratic punting—for haphazard kicking usually favors the opposing team—but rather systematic and consistent punting. This brings tremendous responsibility upon the punter in two ways. Granting the opposing teams to be about equal in offensive and defensive tactics, it remains for the punter to gain the opening for his team, and, failing, above all to prevent his opponents from gaining it. The punter, therefore, is a greater factor in football than the pitcher in baseball,

for he must not only prevent runs, but he must actually make runs. But while the pitcher on most of our college nines receives a most thorough training from professional baseball men, the punter is apt to receive very insufficient coaching, especially in system and in the fundamentals of the science.

Let us begin, then, at the outset of the season, on systematic and methodical lines. First of all, let me warn the punter against doing too much at the beginning of the season. Men are very apt to do this and the result is a strained ligament, which will never quite mend during the remainder of the season. After getting the muscles well worked in by running and light calisthenics (I recommend especially the squatting exercise, which develops the thigh muscles that are used in punting), fifteen to twenty minutes' practice is ample to begin with, during which the punter should have simply the means or fundamentals in mind, and should never attempt the extreme or actual distance.

In the matter of clothing, the trousers should be loose at the hip and knee, and have light padding rather than thick.

bunchy wads which interfere with free action of the legs. The most important part of the apparel, however, and one apt to be neglected, is the shoes. There is a tendency toward heavy, stiff boots among the punters, who think that the heavier the boot the longer the punt. This is an erroneous idea, for the weight of the naked foot, provided it is properly supported, is more than sufficient to send the ball its maximum distance. It does not require weight, but rather velocity and suddenness in the blow to send the ball a great distance.

The shoes should not only be light, but pliable enough to allow the toe to be pointed with ease. I have found that a common baseball shoe, worn over an ankle supporter, combined both the above qualities. Above all, the shoe should be a tight fit, so that there shall be no give or



Photo by Troy, Brookline.

Fig. 1.—Ball Horizontal. Position When Just About to Step Forward for Kick.

slipping of the shoe when the actual contact with the ball takes place.

Let us now take up the means or principles referred to and examine them carefully. They are arranged according to their respective relative importance in the formation of a punter on scientific lines.

I.—METHOD OR "FORM."

During the actual kick—that is, from the time the ball reaches the punter's hands until it leaves his foot—there are three fundamentals which might be called the very essence of good punting and which should be thoroughly drilled into the punter's mind. They are (a) certainty, (b) quickness, (c) uniformity. To combine these three requisites the punter must first of all be sure of getting his punt away cleanly. To accomplish this he must get his kick off quicker by a full second than most punters do. I mention this fact, for, by my watch, I have seen a punter in a championship game take three seconds to kick, from the time the ball was snapped until it left his foot, when the same should have been done in from one and three-quarters to two seconds. After he has conquered these two difficulties and has got one kick off correctly, let him try to do the same thing again and again, thereby securing uniformity, upon which hangs the success of sureness and quickness.

Now that these requisites are pointed out, let us see how to attain them. First of all comes the position or stance, which the kicker takes before the ball is passed. One of the following two stances should be chosen, for any other requires more than one step forward (against which there should be an iron rule) before kicking:

Stance 1. Stand with both feet square to the line, the weight being well forward on the toes, and the hands outstretched to receive the ball. As the ball is passed step back with left foot from eight to ten inches, keeping the weight on right foot and the body well forward. The position of the legs and body (Figure I.) at this stage is much like the runner starting in a long distance event. Just as the ball is about to be caught bring the left foot a full step forward, the right foot remaining in its original position, until the swing of the right leg begins, at the end of which the actual kick takes place.

Stance 2. Take position with left foot back from twelve to fifteen inches. This position is maintained until just before the ball is caught, when the left foot is brought forward as above described, and the kick results.

Both these stances cause the punter to

take only one step forward from his original position, therefore both are allowable. Personally I always preferred the former, because I could get more forward momentum into the body, thereby getting in a swifter blow.

In both stances the position of the legs and body is identical, when the ball is caught by the punter. Their only difference is that in the former the backward step is taken with the left leg as the ball approaches the punter, while in the latter this position of the legs is taken before the ball is snapped. I mention these two stances because to some the first does not come naturally. If this be so, by all means choose the latter. In either case the right foot should be seven and a half to eight yards from the line of scrimmage.

The beginning of the actual kick is the catch. The ball should always be caught with the hands in order to save as much time as possible. The next stage is where most punters begin to have trouble. When the ball is caught it must be put in proper position for kicking before it is dropped to the foot. Most punters do not take the trouble to do this; if the ball lands in their hands at a bad angle they either let it fall as it is, or they endeavor to make it turn in the air so that it will strike the foot at the proper angle. Both of these methods are absolutely wrong; the first, *i. e.*, dropping the ball haphazard, being almost ludicrous. As I have said, the ball must be in proper position (Figure II.) before it leaves the hands. This can be accomplished either by shifting it in the hands, or, without losing the first hold, by turning the wrists until it is in proper position for kicking. The latter method is quickest and safest, and will also save many a fumble. It requires considerable practice and is more knack than skill.

Many kickers drop the ball at random, others toss it so that it will land right; but a still better way is not to let go of it at all. Rather let the foot kick it out of the hands. This is a slight exaggeration, I admit, but, if done correctly, the ball will drop such a short distance that to the onlooker it appears as if it were actually kicked from the hands (Figure V.). In this way, granting that the ball is held correctly, there is little or no time for it to go awry before the foot meets it. At first this will not

come naturally, but if the ball is held at arm's length and the hands lowered, the punter, if he does not get it exactly, will at least minimize the danger of the ball turning in the air from its proper position between the time it leaves his hand and comes in contact with the foot. This



Photo by T. O'Neil, Brookline.

Fig. II.—Almost Horizontal Ball; Correct Position of Foot

again will seem an insignificant detail, but again I say it is all important. Every other fundamental may be correctly performed, yet if the ball be not placed correctly on the foot, the kick will invariably go astray. In other words, a great majority of the bad punts are caused by improper dropping, which in turn causes improper placing on the foot. Every one who has done any punting will surely recognize this, and when one remembers that a punt is a matter of 40 to 50 yards in a field of 110 yards, it is well worth while to pay attention even to the most minute detail, if said detail is liable to cause one bad punt. This brings us to the time when the ball is struck by the foot. The actual contact of ball and foot is interesting as well as extremely important, and can be looked at from these points of view: The position of the ball, the position of the foot, and the manner in which the ball is struck by the foot.

It is difficult to lay down any one rule as to the position or angle at which the ball should be when struck by the foot. Some punters get extraordinary results from kicking the ball with its longest axis vertical to the ground (Figure III.), while others get equally good results with the axis horizontal. Personally I always practiced with the axis almost horizontal (Figure II.), because I met the ball with the foot very high from the ground, and secondly because I found that the "spiral

shin), and the slightest error, such as raising or pointing the toe but ever so little, will cause a corresponding error in the direction or rather elevation of the ball.

The correct position, then, of the foot, is with the toe pointed or lowered as much as possible (Figure II.), and this is greatly increased by the pliable shoe. In this way the point of contact comes entirely upon the instep, which is then really in the same line as the shin and toe, thus giving great control over elevation and at the same time hitting the ball a much cleaner blow. The pointed toe is essential to giving the "spiral twist."

The spiral punt is a beautiful thing to watch, the smooth, even flight making it appear as if it come from a rifled cannon rather than from a man's foot. However, besides this, it has the distinct advantage over the tumbling ball. It is more difficult to catch, coming, as it does, "end on," and having a peculiar shoot at the end of the flight. Secondly, its sailing qualities certainly carry it farther than the ordinary punt, especially against the wind, when it seems to bore its way through the air. But it is also an extremely dangerous toy and must be treated accordingly. The usual way of imparting the "twist" is by taking a step to the side and bringing the foot across the ball. But the slightest misplacement of the ball on the foot always causes a very wide kick. At his best I have not seen a punter who has good or even passable control of his kicks when using this method. Therefore, I would discard it.

In the first place, the step one takes in kicking must be practically straight forward, provided the punt is intended to go directly ahead. This is not natural to most punters, but can easily be acquired. Then, instead of swinging the foot across the ball, simply turn the axis of the ball slightly across the foot (the farther end to the left and the nearer to the right), and allow the ball to hit ever so little on the outside of the instep. The result is that the ball gets a tremendous spin by sliding, not so much off the side of the foot as down the foot, owing to the cross turning of the axis. I really cannot tell why the result occurs, but if it is tried, I feel sure the punter will gain by it. By stepping straight and turning the axis across the foot, the punter obtains remarkable con-



Photo by Troy, Brookline.

Fig. III.—Vertical Axis of the Ball. Wrong Position of Foot.

twist," discussed later, was more easily imparted at this angle. Among the many conflicting theories on this subject, I think the punter's judgment is the best, although I strongly advise the horizontal position.

In the position of the foot, however, there is distinctly a wrong and a right way. If the foot is allowed to remain at its natural angle (Figure III.), (that is, with the sole at right angles with the shin), when the kick takes place the ball is struck by the toe, instep and lower shin simultaneously. Therefore, the ball is not being hit in one place, but rather in three places (by the toe, instep and lower

trol in the direction of his punt, and also does away with the fearful risks indulged in by drawing his foot across the ball or by letting the ball hit on the outside of the instep without turning the axis, for the swing described by the punter's leg is directly in line with the object aimed at, and he has only to place the ball properly on the foot to gain his end. If the punt is to be directed either to the right or left, the step should be in that direction; or, in other words, directly toward the point at which the punter is aiming.

Let the kick be as the stroke in rowing—full of minute detail, yet absolutely thorough, smooth and rhythmic throughout. After one perfect kick, endeavor to make all the rest exactly similar to it. Try, therefore, in going through these steps to begin the next while the previous one is still going on. Have method, vigor and rhythm in all your motions, and when you have accomplished all these things, then, and then only, can you possibly be considered a sure, quick and uniform punter.

II.—ELEVATION.

Thus far we have dealt with the punt, from the time the ball is snapped until it leaves the kicker's foot. Let us now discuss the punt from the time it leaves the foot until it strikes the ground and is caught by an opponent.

First among the considerations is the proper elevation which should be given to a punt. I have never seen a punter kick continuously too high. Yet have we not all seen prominent college full-backs out-kick their ends over and over again, simply because they do not give enough elevation to their punts, their only object being to get maximum distance, irrespective of all other things?

I am a great believer in high punting for several good reasons. In the first place, a punt ascending at an angle of 40 degrees is more difficult to "block" than one rising at a smaller angle, because it passes over the heads of the opponents at a greater height. Following out this theory, if during a game the punter find that his kicks are in no danger of being blocked, he can stand sometimes as much as two yards nearer from his usual eight yards to the line of scrimmage. The pass is therefore shorter, which not only enables the center rush to make a good

snap, but also makes the kick quicker, owing, of course, to the shortened pass. It may be only the fraction of a second, but this moment of time often decides whether a kick is blocked or not.

Secondly, a ball kicked at this angle is extremely difficult to catch. The low punt is much easier to judge, and coming at, rather than down on, the opposing back, the ball can be readily caught against the body. On the other hand, a high punt descends almost perpendicularly, so that the opposing backs must judge it very precisely, and even if this be done with minute exactness, the ball has to be caught

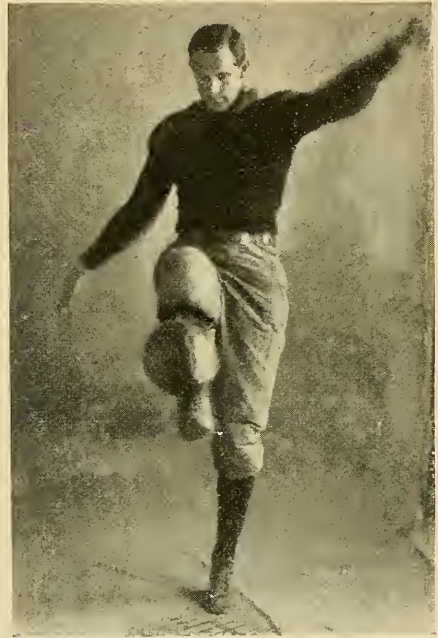


Photo by Troy, Brookline.

Fig. 1V.—Showing Ball on Foot.

with the hands and arms above, owing to the sharpness of descent.

Added to these difficulties is the peculiar uncertainty of descent which a high kick has, especially if it be given the spiral twist. This erratic behavior of the ball takes place during the last fifteen or twenty feet of its flight, so that it gives little or no time for a back to re-judge it. It is caused by the tilting of the ball's axis either up or down. If it happen to be pointing down the ball will shoot suddenly down and ahead; and if turned upward seem to retreat from the would-be-catcher.

I lay great stress on these non-catchable qualities of the high punt, because, as a prominent authority in football once said, the kicking department consists not only in actual punting, but also in handling the opposing side's punts.

In the last year or two certain colleges, instead of endeavoring to block their opponent's punt, have put all their energies into blocking their opponent's players from getting down on the kicks. The formation for blocking the ends from following up the punt makes it essential to give more time for them to get down the field far enough not only to take advantage of a fumble, but especially if the ball is caught, to tackle the opposing back without gain. How else can the extra time be given except by keeping the ball

kick does not bring such good results as does the new method of blocking the line. The argument may be raised that if the enemy use such tactics, the punter can take as much time as he pleases in getting his kick away, because the enemy is paying all its attention to blocking men, instead of the ball. Not so, by any means. For the enemy may, by a given signal, use either method, at his discretion. So the same quickness must be retained in the actual kick, and there remains no other way to give the ends proper time than by keeping the ball longer in the air. In other words, a high punt.

Among the fundamentals, one of the most important yet troublesome stages of the "actual kick" was the transit of the ball from the hands to the foot. Now, in order to send the ball at an angle of 40 degrees, it is necessary to meet it with the foot high up from the ground, and if the hands be lowered the punter will decrease this transit tremendously; so short is the drop of the ball that, as I have said, to the onlookers it appears as if actually kicked from the hands.

By this method, too, the ball can be dealt a sharper blow, so essential to distance, than in kicking a lower punt—because, not meeting the ball until so late in the swing, the foot acquires greater velocity than if the ball were met sooner.

Against high punting there are some plausible arguments, which, however, can be easily refuted. Men argue that the high punt has no roll after landing, owing to its perpendicular descent. This is not true, for owing to the ball's peculiar form, the roll depends to a great extent upon how it lands. Every one has witnessed a low, hard punt stop short on the first bound simply because it landed in a manner which prevented the roll. No human being can control this part of the kick.

It is argued that against the wind high punting is an absolute failure, but against the wind every punter naturally kicks lower than usual, so it is only fair to apply this style to the high-punting class.

III.—ACCURACY AND PLACING.

The next principle in punting is to place kicks on the field of play in such a manner as to obtain the best results. Accuracy in punting relies upon the two fundamentals, sureness and uniformity, to a greater extent than one would suppose,



Photo by Troy, Brookline.

Fig. V.—Actual Kick. Showing Ball being Kicked from Hands.

longer in the air? Surely not by slowing up the kick itself.

Although only a very few colleges have taken up the idea of blocking opponents from getting down the field, I believe it will soon become universal, for since the "direct pass" has been invented, the number of blocked kicks has so enormously decreased that an attempt to block the

for until the punter is sure of getting his kick away correctly, and is sure of doing this again and again in exactly the same manner, he cannot be said to have good control of his punts. Although these fundamentals are essential for control, the real secret lies in the direction in which the punter steps.

Step straight toward the direction in which the kick is intended to go. In this way the swing of the kicking leg is brought into the plane of direction, and it remains only to place the ball properly on the foot to have the desired result.

Only after the punter has become proficient in the accuracy of his kicks is it time to consider where to place them. In general, the best place for a punt to land is as near as possible to the side line. In this way one of two things happens. Either the ball goes out of bounds, or, if the opposing back catches it, he is cornered, as it were, and is, therefore, less liable to evade the punter's ends. If he is downed anywhere within fifteen yards of the side line, it places the enemy in a disadvantageous position from which to punt, because it is always bad policy to kick from a position nearer than fifteen yards from the side line, for fear of the ball going "out of bounds" on the near side of the field before it has gone the required distance. To kick across the field from such a position is extremely dangerous, for the side line is too far away to be sure of putting the ball out, and it gives opposing backs too clear a field.

If the ball be close to the punter's goal line, it is always good policy to kick out of bounds, thus preventing the opposing side from a fair catch and attempt at goal from field. Likewise, if within punting distance of the opponent's goal line, endeavor to send the punt out of bounds as close to the goal line as possible. In both cases, granting that the ball is more than fifteen yards from side line, always direct the punt towards the side line that is farthest from you, because you are then kicking at the side line, and can put the ball out within a short distance of where you aim, while if you endeavor to put the kick out of bounds on the near side of the field, you are kicking really along the side line, and the ball is therefore liable to go out before the punt has gone its full distance. In this way, I admit, there is a slight loss

in actual distance, but you are almost sure to gain the desired result, and the loss of a few yards in distance is nothing so long as you accomplish what you aim to do.

By using the above methods, a punter, although he be out-kicked as far as actual distance is concerned, can often out-general his opponent so that the net result of their punts will be equal.

IV.—DISTANCE.

I have reserved actual distance in punting until the end, in order of importance, because by itself it is really the least important of the great principles. That is, if the punter neglect the various considerations which have been placed before this one, and attempt to kick simply for distance, he will fare badly when against a man who has been thoroughly drilled in aforesaid requisites. A second reason for placing this particular subject last is because the average, and especially the young punter, is anxious to show how far he can kick, and is prone to omit the details and fundamentals upon which such stress has been laid.

Against this I say that he should practice at least two weeks before attempting to get good length to his punts. If he does not, in the first place his leg cannot stand the strain, and, secondly, he will be, as a house built upon sand—without proper foundation.

In order to attain maximum distance in punting the kicker must consider, first, proper elevation, and, second, how to deal such a blow as will give the greatest velocity to the ball. Back of the actual swing of the leg, the body is a pivot upon which the leg is hung, as it were, and the more momentum that is given to this base the greater will be the force imparted by the swing of the leg. Therefore, the body should be started forward as if the punter were starting in a race. In this race, however, the start is the whole, for at the end of one step the kick takes place and the race is then over. Having got as much momentum into the body as the circumstances will allow, let us see how best to use the leg. The leg is a pendulum with remarkable spring in it, and should be used as such. It is not so much brute force as a peculiar snap of the leg at the end of the swing which gives velocity to the ball. Endeavor then, to give the ball a sharp click rath-

er than a heavy blow. This kind of a blow is extremely difficult to explain in words, for there is more knack to it than anything else. Many punters straighten the leg too soon (Figure III.), so that it is rigid, when contact with the ball takes place, and it is therefore without spring. Rather the leg should be slightly bent (Figure II.) until the foot almost hits the ball; then, by straightening it with a snap from the knee, the peculiar click or snap-blow is given, which causes greater velocity than if the knee were straightened before the ball was reached. (Figure IV.).

Of course, a good, full swing is necessary, as in golf, but it is the final snap of the leg, accentuated with the wrists in golf, which gives to the ball an extra impetus. Often in practice the punter will, without meaning to, and with apparently little effort, send his kick an extraordinary distance. This means that he has hit the ball exactly the right kind of a blow, and if he analyzed this blow he would discover that it was by using the leg in the above manner that he obtained such a remarkable result.

As a parting warning let me beseech

the punter not to practice too much. This may seem strange advice, but let me explain further. During the daily practice at our colleges a certain time is allotted to punting. The punter is told to go out and practice for a half hour, let us say. This is quite proper in the early part of the season, but if kept up to the end, and it usually is, the punter will become stale in his kicking, just as he will get overtrained physically if allowed to do too much work in other ways.

Instead of practicing so many minutes or hours, the punter in the early part of the season should work, always keeping the fundamentals in mind, until his leg feels tired. By mid-season he should have corrected most of his faults, and therefore apt to be in "top form." From then on is the time when the punter is liable to do too much practicing. Granting that he is kicking well and to the best of his ability, he should not practice any stated length of time, but take from fifteen to twenty punts a day, simply to keep his hand in. If he finds himself getting slow or losing control of his kicks, etc., let him then practice as long as his leg will allow, until this fault be corrected.

THE FOOTBALL PLAYER'S HARNESS

By Charles Chadwick

TO the uninitiated the football warrior is a canvas-and-leather cousin to the steel-armored knights of the middle ages. The daily press with its savage portrayal of the gridiron hero—nay, the actual appearance of that much-advertised individual, seen from the distance of the bleachers—lends color to the popular conception of him as an unwieldy sort of creature, bound round with leather trappings, wearing shoes of iron, falling, when he falls, on cushions, and buried at all times within an impervious tumulus of leather, canvas and wadding.

Carlyle said half a century ago: "It might strike the reflective mind with some surprise that hitherto little or nothing of a fundamental character, whether in the way of Philosophy or History, has been written on the subject of clothes." And

in the sphere of the recently-developed game of American Rugby, the same remark applies to the multifarious writings upon football to-day, from the technical newspaper account of yesterday's match, to the magazine love-story whose scene is the gridiron.

The writer of this article, while desiring in no way to arrogate recognition with the learned Herr Teufelsdröckh, thinks, nevertheless, that it may be worth while to give to those interested in the subject some accurate information with respect to the harness and trappings of the footballist of the year 1900, and, in addition, to furnish perhaps a few suggestions in the same line to the player himself.

The accoutrement of the football player of to-day may be put under two divisions—the costume proper, and the various de-

vices by way of protection which are added to it. It is this latter division which lends a unique interest to the subject.

The costume worn in the early history of the game was entirely devoid of devices for protection, and differed in no essential from that worn for any form of outdoor exercise. It consisted principally of woolen knickerbockers and jersey; usually a cap was added, with a tassel attached. As in the early history of rowing, when the crews wore silk hats and tight-fitting coats, the first stages of evolution in football costume were marked by an attention paid more to the ornamental than to the strictly useful. Indeed, this may be said to epitomize the history of clothing itself, which, sociologists tell us, found its origin in primitive man's desire for display and not in his need for either warmth or protection. Twenty-odd years ago the process of differentiation of the American college game of football from the general elementary form of the game was just beginning. There was a bare indication at that time of the rapid strides which have been taken toward placing it far above any other game in point of scientific development and elimination of the element of blind chance. For the past dozen years at least American college football has been the game of games between teams of men. As in the English, Canadian, Gaelic and other forms of football to-day, the players wear a costume with practically no protection from bruises or blows of any kind, so in the early 'eighties the need for protection had not yet been realized in the American game.

The writer remembers very well the year he was introduced to the game while at school. He donned every afternoon an old pair of long trousers and a vest turned inside out, and went in as a snap-back on the second team. Description of the costume would be incomplete without mention of the cap. This was no padded leather headgear, such as is worn to-day, but a brown-and-yellow worsted affair, surmounted by a tassel, and worn wholly for ornament. Long hair, now in its turn a thing of the past, had by that time taken the place of the woolen cap in the colleges, but the cap continued in vogue at the schools probably some years after its disappearance from the colleges. As might easily have been expected, the cap came off many a time in the course of a game.

It then became an engrossing necessity to decide whether to follow up the play with the possible chance of tackling and downing the runner, or to recover the cap. As it had been knit by a friend, and, in consequence, was highly valued, the decision was generally in favor of the latter alternative. At the period of which I speak, jerseys were often torn completely from the wearer's body, and occasionally a wounded warrior was borne apparently senseless from the field of honor by his mourning comrades, to return in two minutes completely revived, and clad in a new suit.

The development of every game along scientific lines produces a costume peculiarly adapted to it. The same principle of evolution which has given us in baseball the mask, chest-protector, mits, pitcher's toe-plate, etc., and in track athletics the spiked shoe, soon caused the appearance on the gridiron of canvas or mole-skin trousers with padded knees, the harbinger of the manifold devices for protection which were to follow.

The period of the early 'nineties may be compared to the latter part of the middle ages, when the armor worn in battle and tourney became elaborate and cumbersome in the extreme. Generally speaking, football armor has been used for ten years past and has flourished during the latter half of that period.

It has recently gone to the extreme of unwieldiness owing to the tendency which seems peculiar to this game—that of playing a badly injured man in place of an inferior uninjured substitute; and while some of the best players, particularly back of the line, have wisely refrained from handicapping themselves with a burden of heavy protections, among the great mass of players unnecessarily heavy accoutrements have been the rule.

I recall vividly a pair of trousers made for Stillman, Yale's center in '92, '93 and '94, which were so thickly quilted throughout that they were able to stand upon the floor without any external (or internal) aid whatever. In justice to this great exponent of the game, it should be stated that the garment in question underwent extensive alterations subsequent to its first appearance in the gymnasium.

It was about 1893 that the modern leather headgear, which is now used so extensively, especially by plunging backs,

made its appearance. It was worn by one or two of the University of Pennsylvania backs at the Yale-Pennsylvania game of that year, and in contrast with the bare unprotected heads of the other players, it lent an exceedingly warlike appearance to its wearers. One of the earliest shoulder saddles was worn that same year by Murphy, of Yale, who played through two championship games with a badly injured shoulder.

For the past few years the period of multiplied armorial devices has been on the wane, due in great part to the influence of older exponents of the game, such as Beecher, who from the first have cried out against the unnecessary evils of over-protection; and while the football player of the past two or three seasons has had the appearance of being heavily laden, he has been really very lightly burdened. In many cases his clothes are lighter in weight, and in all cases they are easier to move about in than the ordinary citizen's dress, in spite of their unwieldy look.

The costume proper of the football player to-day may be here briefly summarized for the benefit of the uninitiated reader. It consists of a sleeveless canvas jacket and very loose moleskin or khaki trousers sewed together with an elastic waistband, the whole forming one piece. With this is worn a jersey, stockings, and leather shoes, with leather cleats nailed to the soles to prevent slipping, and a stiff leather toe-cap, particularly in the case of a kicker. It should be said, however, that at the outset of the season, and generally until the approach of the final big games, it is customary to discard the canvas jacket and elastic band, and wear only the jersey. This leaves the wearer a little freer, but gives his opponents a better hold.

Coming now to the devices for protection—the necessary protections for the uninjured are three—the leather laced ankle-supporter, the hair pad inside the trousers for the knee, and the shoulder pad sewed to the jersey. These may be regarded in the main as indispensable. It is only recently that protection of the point of the shoulder and collar-bone has been estimated as of equal importance with the knee and ankle, and many of the huge shoulder saddles which have been seen at the end of the season in past years, and the consequent playing through the

game with the acute agony of an injured shoulder, might have been avoided by judicious protection at the outset.

These three points, the ankle, knee and shoulder, are fundamentally vulnerable, and in nine cases out of ten a player protected as has been indicated will last through the season unharmed. There might be added to these three the hip pad for line-men to be used at the beginning of the season, during the preliminary practice of falling on the ball, to mitigate the temporary bruises which are sure to come at that time. But in general the hip pad is a useless appendage. It must be stated, however, that in matters of protection, every man is to a great degree a law unto himself. Some players, for instance, will find it necessary to wear thigh protectors and headgear straight through the season.

So much for protection to the uninjured player. The different forms of harness which have been devised to meet the various exigencies of an injured man who must play as long as he can stand on two feet, are too numerous to come within the scope of the present article. It will suffice to describe a few of the more important.

They fall naturally into two classes, those designed to support and give strength to a joint weakened by a wrench or other injury, and those designed for protection from blows that might cause further harm.

In the first class may be named the appliance used for a wrenched ankle. In addition to the leather support already mentioned, by far the best is a simple strip of heavy canvas about two inches wide, used as the ordinary surgeon's bandage. There are many varieties of bandages for the knee, and other joints, made generally of rubber or silk-elastic, and devised for the particular injury in question.

A sprained finger is often bound to a well one with adhesive tape, or several not necessarily sprained fingers are sometimes fastened together in this way for the sake of greater strength and tenacity in tackling.

For a weakened back, an appliance sometimes used is a *belladonna* plaster ten inches wide, completely encircling the wearer's waist. Often to this is added *capsicum* beneath the plaster, which, as soon as the wearer begins to warm with exercise, burns like a flame, producing a

very strong stimulus to the nerves. It is a fact worth noting here that all remedies used in football, owing to the shortness of the season and the necessity of immediate preparation to play, are of the kill-or-cure variety.

By far the more interesting appliances are those designed to avert further injury. It is here that the ingenuity of the trainer or of the player himself is called in to devise something which will afford protection without impeding movement.

The headgear, though sometimes worn before injuries make it necessary, belongs to this class. It may be designed to protect either the ears alone, or both ears and head. It is made of thin leather straps. The helmet part, when such is added, is of thick leather shaped to fit the crown of the head and lined with felt. The ear pieces are made large enough to surround the ear, the felt padding leaving a hole the size of the ear and fitting around it. Over this is sewed a circular piece of leather punctured with small holes to allow the hearing of signals.

Sometimes it happens that a player has played unhurt with unprotected shoulders through the season, and has the ill-fortune a few days before the final game to fall a victim to that peculiar injury of the point of the collar-bone. A number of appliances may be worn simultaneously in such a case. In the first place, the arm is somewhat paralyzed and weakened, and in order that it may be used as much as possible, it needs to be strengthened and held in its place. This is accomplished by a woven elastic bandage made to fit tightly over the arm and shoulder, like the upper part of a sleeve, and to lace across the chest. Over this is worn an aluminum shield hammered to fit the shoulder. This, as in the case of the thigh shield hereafter described, effectually prevents a blow from reaching the injured spot. It may rest on a hair pad of moderate thickness. The jersey covers it all, and on the outside is worn the shoulder saddle made of sole-leather, strapped across the chest and reinforced by a heavy thickness of felt. Thus armored, the man with an injured shoulder can play through a game and tackle as fiercely as a well man without increasing his injury, except that no amount of protection can avert the risk of possible injury from a wrench.

A hurt to which a line-punching back is

often exposed is a bruise on the front muscles of the thigh. To prevent a repetition of this an oval shield about a foot long made of leather, or, better, hammered out of aluminum, with padded edges, is constructed to cover the thigh muscle and distribute the blows received there, above, below and to each side of the injured place. This is worn inside the trousers and is bound to the leg by elastic and tape. Another device, not quite so good, used for this purpose, is an inflated bladder, of a flat, oblong shape.

A very common device for a bruise, especially a bruised knee or shin-bone, is a piece of felt about an inch thick with a hole in it. This causes the blow to fall elsewhere than on the bruise. But in general small bruises are disregarded, as the player in the course of his training attains to a degree of insensibility to small hurts or jars inconceivable to one who has not played the game.

For the past few years, as has been said, the period of heavy armor has been on the wane. Indeed, it would seem almost axiomatic in a game in which excellence in any position, from guard to quarterback, has, by common consent of experts, been held to depend on skill and quickness more than on strength and weight, valuable as the latter qualities are—that the football player's harness should be as light in weight as it is possible to make it. Every additional unnecessary ounce borne by any part of the body not only diminishes the player's speed in running and dodging, and his quickness in handling himself in scrimmages, but also lessens his endurance and his strength *pro rata* before the end of the game.

The man playing a championship match with heavy, unnecessary quilting in his trousers, or heavy shoes, is handicapped in exactly the same manner as the race-horse who carries a weight in addition to the rider. Yet this principle is not realized to its full extent by many coaches and players. It has been argued that a heavy shoe gives a better hold on the ground, as if—even if this were true—it were any part of a football player's game to stand still in one place, when it is obvious that a light man with momentum offers a much greater resistance to a play than a heavy man who stands still and merely braces himself against the shock.

In this connection the question of shoes,

is of some importance. Durability, strange as the statement may sound, is not a factor in the football shoe, and it should be sacrificed in every case to lightness. A game, it must be remembered, is, at the most, but seventy minutes of actual play. It will perhaps surprise many to be told how flimsy a shoe may be, and yet last through weeks of hard practice and two championship games. The writer wore a pair of cheap bicycle shoes with thin chamois soles, which were the lightest obtainable—with, of course, the addition of cleats

Their superiority was evident more in their speed than in anything else. The Columbia men were carried clean-off their feet. In technical phrase, the Indians "got the jump" on them. It was noticeable on a near view of the players that the Indians wore light canvas trousers with almost no padding, in place of the heavy moleskin quilted ones of some of their opponents, and their shoes were light baseball shoes.

It might be well, bearing in mind the foregoing ideas, to outline for the player



Modern Football Players Fully Equipped.

and stiff toe-cap — through the Yale-Harvard and Yale-Princeton games of '97, and the contemporaneous practice. Dibblee, of Harvard, probably the most elusive half-back that ever appeared on the gridiron, wore shoes that resembled slippers.

While on the subject of lightness in clothes, the Carlisle-Columbia game of last season may be instanced to support this contention. The Indians, it will be remembered, overwhelmed the strong metropolitan team by a score of 45 to 0.

of to-day a plan to be pursued in the wearing of football gear. The plan is briefly this: Begin the season with all of the most necessary protection, and plenty of it; then, if any injuries occur, use the special appliance for that injury; finally when entering a championship match, discard everything that it is possible to discard. Hall, the Yale end-rush, played two successive matches with absolutely no protection, not even a vestige of a knee pad, and many other notable instances of this kind might be mentioned.

PRACTICE FOR FIELD SHOOTING

By E. W. Sandys

WHILE a few good shots may be born, most reliable performers are made by an expensive and tedious process. They learn in the great school of experience, which frequently employs harsh methods and is wasteful of valuable time.

Many of our best shots began as young boys, and by following no particular method, but shooting much, gradually attained a high degree of skill. Constant practice is apt to make an average man fairly good at any specialty he may choose, and this without any scientific or theoretical knowledge of the game he follows. The trouble with this methodless school is that it develops all styles of bad form, and certain faults of which its graduates may remain in ignorance until the evil has become so firmly established that its cure is an exceedingly difficult matter.

But, the reader may exclaim, I know So-and-So, and he's a wonderful billiardist, or runner, or shot, and he never had a lesson; he just picked it up himself, and he's better than all your theorists or professors. That may be almost all true, or just partly true. The individual in question simply possessed natural qualifications which peculiarly fitted him for the game he fancied most; he saw that game at every opportunity; he noted every move and mannerism of the winners; one of them impressed him more than all the others, and deliberately, or unconsciously, he imitated that one.

This was simply being taught, although possibly without the pupil being aware of it. And, furthermore, the pupil in all likelihood had several masters. Being bright and having a natural love for the game, he closely observed every peculiarity of every winner, and, while following the methods of the one nearest his ideal, he also adopted a little from others. As striking peculiarities of "form" usually are faults, a composite "form" acquired in this way is apt to be a handicap rather than a thing to be desired.

People, young people especially, are prone to idolize and imitate a winner, but before the novice attempts to do things as

he sees a good shot do them he should mentally compare his build, temperament and other characteristics with those of his model. Some men, and good shots, too, handle a gun in a peculiar manner because they have to. Their way may be a bad way for a man of an entirely different build. For instance, a man may be an excellent shot and yet clutch the trigger-guard with his forward hand. Owing perhaps to an abnormal shortness of arm, or to some old injury to, or peculiarity of the muscles of an arm, this may, for that man, be the easiest and best way. But this does not prove that it is the best way for any or every man.

As a rule it is well to avoid extremes. About the middle of the fore end is where the designer of the gun intended the forward hand should be, and this most learners will find the best place. I use the term "forward hand" because there are many left-handed shooters and quite a number who can shoot from either shoulder. I know a number of fine right-hand shots who habitually shoot with the left arm almost straight, so that the left hand grasps the barrels in front of the fore-end. Very long-armed men, to which class I belong, are apt to do this because the most natural point for the left hand falls beyond where the gun-maker figured it to be. This method of holding, so long as the left arm finds it easy, is not necessarily a fault, but I cannot advise a reader to adopt it unless his build compels him to. Wherever the forward hand finds the quickest and easiest control of the gun is the best place.

The best way to learn to shoot in the field is to shoot—next, keep on shooting. It is better for a novice to waste fifty shells than to go pottering along, baulking chance after chance because they look too difficult. What he should do is acquire the habit of instantly leveling the gun at the first buzz of a wing. Swift-ness and smoothness of action here mean the saving of a fraction of time, hence a gain in time for the proper covering of the bird. An experienced shot will have his gun almost to his shoulder before his eyes

have had time to identify the bird. The trained arms learn to respond almost automatically to the faintest hint from eye or ear. The old hand seldom misses the unexpected bird. In some apparently mysterious manner his gun seems to leap of itself from wherever he may have been carrying it to his shoulder, and it is odds on that he kills the bird. Long practice has so trained the muscles that they act instantly, and the bird is killed before one would think the man had time to properly grasp the possibility.

If in such a case one will pace the distance from where the bird rises to where it falls, he probably will find it astonishingly short. Yet the trained eye, or ear, or both, had time to flash the warning, the brain had received it and signaled first a halt and then the proper action to the muscles which brought up the gun and leveled it upon the instantly selected shot, the trigger finger had received its message and acted upon it, and all this while a swift and entirely unexpected bird had been whizzing over perhaps not more than twenty-five yards.

The distance at which a good gun may be depended upon to kill small game is a matter about which the novice is apt to have hazy notions. The great majority of grouse, "quail," snipe and cock fall within thirty-five yards of the gun. Fifty yards would mean a long shot in the open, while half that distance in cover would be about as far as one could clearly see a bird. Any one who will take the trouble to hang up a bird in average cover, then step off twenty-five paces and turn and look at it, will at once realize that most of his kills have been at a shorter distance.

The regular test for a gun is at a thirty-inch circle at forty yards. At this distance a fine gun will show sufficient penetration and a sufficiently close and even distribution of the shot to make reasonably sure work. Every yard beyond this counts in favor of the bird. Of course, extraordinarily long shots will now and then be made. I once killed a Canada goose at, as near as I could pace it, *ninety-six yards!* In this instance a pellet happened to exactly strike a neck-joint and the goose fell as though struck by lightning. It was only a few yards above the marsh and it fell straight, so there was no drift to add to the distance. For a mo-

ment I was so astonished that I could only whisper, "Well—I'll—be—blanked."

Let us now suppose the novice has acquired the act of handling the gun smoothly and rapidly, so that he can bring it up and promptly cover any selected stationary mark. This pot-hook stage requires very little time. He should next get a friend, an experienced shot preferred, to toss up objects for the practice. Blocks of wood about four inches square will serve, as any shot-marks may be scored with a pencil and one block used several times.

For this practice I should recommend the use of very light charges, and that the blocks be tossed straight up, high, and not more than eight or ten yards from the shooter. The lightly-charged shells will cause no recoil, there will be no excuse for that common fault—flinching slightly as the trigger is pulled—and a considerable quantity of ammunition will be saved.

The involuntary flinching in anticipation of the discharge, and a jerking instead of a steady pressure on the trigger are two faults common to most beginners. The former will disappear, but the latter may require more attention. The proper way to pull a trigger is by a rapid but steady pressure of the forefinger, the hand meanwhile firmly closed upon the grip. The faintest approach to a jerk will surely disturb the aim, so the finger should act independently while the hand and arm remain motionless. A little practice with an empty gun will enable one to master the knack of proper pulling, and, once mastered, it will not be forgotten. As the novice shows ability to hit these blocks, the distance should be increased to twenty and thirty yards. When he can hit two in five at the latter distance (of course now using full charges), he should be ready to drop an occasional bird in the field.

The most common shots in upland shooting are straightaway or nearly so, and to most men these are the easiest. The chief trouble with the novice is that the whirr of wings rattles him. He thinks that birds are going twice as fast as their actual speed, and he is so afraid that he will not shoot quick enough, that he actually shoots far too soon. If the bird rises anywhere within twenty yards, and the gun be brought to position as rapidly as it should be, there is time—plenty of time,

although none to waste—to get fairly on the swiftest game that flies.

“Quail,” for instance, make a resounding whirr on springing and appear to go like bullets in feathers. In reality they, especially early in the season, do not fly very fast, and as they usually get up from almost under one’s feet, a smart shot can, should he care to, drop them within twenty yards of the rising-point.

The grouse of the plains, early in the season, offer the easiest sort of marks. There seldom is anything to obstruct the view, while the birds, although making a great fuss, fly comparatively slowly. Ruffed grouse are swift, strong fliers, but it is the nature of the cover they usually are found in, rather than phenomenal speed, which makes them difficult marks.

Snipe fly fast, but it is their erratic twisting as they get fairly under way, rather than their speed, which bothers the shooter. Woodcock frequently show astonishing speed, and as a rule, tower up and twist to one side with a peculiar wavering motion, rather slow, yet baffling until one has become accustomed to it.

But, fly as they may, birds cannot outfly shot, and a properly directed charge will surely bring them down. The simplest and best rules are: Cover all of a bird flushed close and going straight away, because it is almost certain to be slightly rising; hold just above a bird going away low, because it is rapidly advancing. Hold at least a few inches ahead of a bird going to right, or left; hold dead on one coming at you, and hold directly ahead of one passing above you—and in every case, excepting a bird going straight away, or coming straight in, and low, keep the gun swinging at the same rate as the mark until the shot has left the muzzle. The stopping of the swing of the gun as the trigger is pressed is one of the chief causes of misses at angling birds, and nothing but intelligent practice will cure the bad habit.

The proper distance to hold ahead of a bird depends upon its rate of speed, how far it is from the gun, and how great an angle its line of flight presents. The center of the charge should strike the bird. The novice should bear in mind that not one bird in one hundred is missed through holding too far ahead. Modern powders have only lessened, not done away with, the allowance necessary for a

crossing or angling bird. At a reasonable distance a charge of shot forms quite a large circle, and if the center of the circle is anywhere off the bird, it is best ahead of it—*i. e.*, it is better to have the bird just flying into rather than out of the circle. A single pellet in the head or neck is likely to bring the bird down; a single pellet striking the body anywhere forward of its center may prove deadly, or cripple the game, but a bird may be struck by several pellets in the rear part of its body, or in the legs, and still struggle away to be perhaps lost and die a lingering death.

I have heard good shots claim that they always held dead on and trusted to the swing of the gun at any reasonable range. This is an error. They think they do as they claim, but one cannot hold dead on a crossing or angling bird and make the center of the charge strike it, although a scattering pellet may do so. Swift though the pellets fly, they cannot be at both ends of a thirty-yard range, or any other range, at the same instant. Say the range is thirty yards and the mark a “quail” at top speed going at a right angle to the line the shot will traverse. The gun may swing all right and not be stopped before the shot starts, but a fraction of time must elapse before the shot can travel thirty yards. During that fraction of time the “quail” will move a certain distance, which, short though it be, is the exact distance the gun should be ahead of the bird when the shot starts upon its journey.

Many crack performers on the uplands fail at waterfowl, at least until, as they say, they have caught the hang of the thing. The difference in the shooting is the difference between the rapid, snappy work of the covers and the liberal leading of birds and unchecked swing of the gun which are so characteristic of the expert wild fowler. Geese and duck fly very fast—much faster than they appear to, and they usually are considerably farther from the gun than a novice would suspect. They can carry off a deal of shot, too, and he who would pose as an expert at them must center them fairly. To do this he must hold well ahead and not stop the swing of the gun as he pulls trigger.

In conclusion, I would advise the young sportsman to learn to shoot with both eyes wide open; two are better than one. A little experimenting will convince him of this, for he will see better with two.

AFOOT IN NATURE'S GAME PRESERVES

THE ADIRONDACK PARK REGION

By Leonidas Hubbard, Jr.

WORDS, no less than men, are corrupted by evil associations. So it happens that our little monosyllable, "park," calls up in many minds a visual image with foreground of asphalt walks, cast-iron benches and tired nursemaids. Such must have been the effect of its pronunciation upon a postmaster far within the boundary of the proposed Adirondack Park, for when asked where that boundary lay, he replied:

"Why, there ain't any park around here. The nearest one's at Northville. It belongs to the railroad and has tame deer in it."

If visions of tame deer and lawn mowers arise in the mind of any reader of this article when the Adirondack Park is mentioned, let him cast them out. Imagine, instead, 4,500 square miles of mountain and forest lying north of the Mohawk Valley and south of the plains of the St. Lawrence; west of Lakes Champlain and George and east of the farming land at the lower end of Lake Ontario. Add to this, rough roads over which stages, drawn by two, four or six horse teams carrying mail to insignificant little post-offices thirty miles from the railroad, rattle over brooks and across rivers, past lakes and ponds, while mountains tower on left and right, with stretches where a break-down would mean a ten-mile walk to the nearest settlement. Place here and there the stony little clearings and rude houses of the mountaineers. People these with rough, good-hearted men; men who will tell you it is sixty miles to Lake Placid by road, but that you can reach it in twenty-seven miles across country by taking a trail at the northeast corner of a certain clearing on Boreas Pond, following the right branch after the second creek is crossed and keeping the trail to Indian Pass. Men they are who know the whole country within a radius of forty miles as though it were their own wood lot.

It is as though Nature had designed the Adirondacks for a spot sacred to her own worship. She seized the bottom of

the old Archæan Sea and lifted it above the primeval waters. Then she crumpled it together in mighty rolls, with high peaks, deep valleys and great, jutting, igneous rocks. As the ages wore away, some rocks broke apart to make soil, and Nature, fearing lest the valleys should become fertile, lest men should enter them to plant crops, make homes and build cities, sent great ice sheets scouring the mountains and carrying down into each valley masses of broken rock which should make the soil unprofitable for tillage.

A desire for that primitive sort of freedom which comes when man turns his back upon the land of convention and crosses the boundary into Nature's domain, sent me walking southwestward from North Creek on a July afternoon with no baggage save a small camera. But let me make my apologies at the beginning. Let me confess that I traveled more on hope than on faith. I hoped to find wild country, but, being just out of the West, where we are given to picturing the Adirondacks as a sort of backyard to a boarding-house syndicate, I had my doubts. The idea that here, in the heart of Eastern civilization, was a great tract of game-filled forest seemed out of the question, and my faith in being able to meet Nature in her own haunts was small. But if I could find her, the news might accumulate, nations might rise and kings might die; they would not trouble Nature or me. For some days, at least, the goddess and I would be lovers; we would tell each other our secrets, and that jealous old witch, Civilization, might scowl to heart's content.

To get a view of the promised land I left the main road and followed an old time wagon trail to reach the summit of Crane Mountain, which looms up, as symmetrical as a giant fortress, on the very boundary of the proposed park. Round and round, and up and up, led the trail; now across a gulch, now beside a mad, dashing little mountain brook, to the clearing where stand the deserted

buildings of the old paint plant. Then I stumbled over stones, up and up a steep footpath, to the rocky tableland, where dwarfed fir and popple struggle with blueberry bushes for every bit of soil and moisture.

I pass Crane Mountain Pond, its waters clear as any spring, and its bottom of bare brown rock; pass into a pathless wood of birch and popple, which changes to rank fir thicket, and now standing, now on hands and knees, clamber up the peak to the old Government signal-pole.

About me lie the Adirondacks, mountains and mountains and mountains; endless on the north and west, with a hollow where I know Lake George must be on the east, and merging southward into a level plain. Ah! there are men and cities and telephones, and I shake my fist at them. To the far north, blue and hazy, are the highest peaks; they belong to the group of giants about Mt. Marcy. A dozen ponds are scattered here and there through the forest, and some pretty villages are on the north and east. To westward the woodland is unbroken, save here and there by a rock where even the aggressive little fir can gain no foothold. I think of the wild things that lie hidden in that stretch of forest, and make a mental apology to this region for misjudging it.

I sit with my back to a precipice and a sparkling breeze strikes my face. It is a feather-weight breeze, well trained, that dances lightly about, ducks playfully out of the way, but lands hard and often when it tries. How close the sky seems; how bright the fleecy white clouds, that sail unconcernedly about, cutting off the sunlight, now here, now there, from a man or a hay field or a town. They are like some thoughtless, selfish persons, who get in your light or puff their cigars in your face and never think of begging pardon.

It was near sundown next day when walking down the valley of the Sacan-

daga, intent to penetrate that wild country I had seen to westward, I came to Oregon. Here the valley of the little stream widens into a meadow-covered alluvial plain. Oregon is a deserted village. A score of empty buildings show where a great tannery has been abandoned. Only two families are squatting in the valley now.

It is nine miles, they say, to the nearest stopping place. But I do not care. Along the stream runs a mountain road, a little brown line half hidden by beech and hemlock, birch and maple; spotted everywhere with deer tracks, great and small. Two of the animals stand at the roadside, and I hear them crash away through



The Deserted Tannery, where Business Once Thrived.

the woods as I approach. Now I almost step on a lazy porcupine, and a few steps further on a woodchuck hurries across my path. Here road and river converge, and I hear trout jumping.

When at last I saw the light of Griffin—I saw but one, though the postmaster-farmer-landlord assured me that three families lived there—I had walked sixteen miles along a good road and passed but three inhabited houses.

Following his direction I walk, next day, through a tangled wood, along a mad little mountain stream, and at Lake Pleasant see the first resort in a walk of forty miles. Rest seekers reach Lake Pleasant after a stage journey of twenty

six miles. The lake is four miles long, and Lake Sacandaga, equally large, lies at its side. The village is county seat of Hamilton County, and the primitive character of the community is indexed by the tiny county buildings and the fact that absence of lawyers has led to the election of a doctor for County Judge.

Tall and blue, on the east, Speculator Mountain rises from the water's edge. I am standing on the bank in the early morning, watching a moving picture of drifting clouds above the mountain top when, suddenly, from a cottage on the farther side, the shrill notes of a bugle come floating through the morning stillness. It is a time and place for poetry. Instantly come the lines of Tennyson:

"O hark, O hear: how thin and clear,
And thinner, clearer, farther going;
O sweet and far from cliff and scar
The horns of Elfland faintly blowing."

And one imagines himself in the land where

"The splendor falls on castle walls
And snowy summits old in story."

I am still standing by the lake side when the stillness is broken by a rush of feet and a rattle of wheels as the out-going stage dashes past. There is something typical in the stages that penetrate this region. Compare the dashing, sun-burned stage-driver of the mountains with his sallow, red-nosed contemporary who stands in front of the Grand Central Depot and calls, "Keb, keb, keb, sir? Keb?" As the one is to the other, so is wild Nature to an effete civilization. I look at this hardy fellow and know that, rain or shine, in spite of shower or wind or blizzard, he will drive his twenty-six miles each day, to or from the station at Northville. He will meet emergencies as they arise, and he will not complain of cold, darkness or storm. He is a man and he has my most profound respect.

North of here, eastward of the Indian Lake region, lies a great stretch of wild land. Thirty miles away, through the very heart of it, is North River. As usual, there are plenty of Jeremiahs who tell of dire happenings sure to befall any one who ventures into this forest. But there is an old, half-marked wagon trail leading north and east. Somewhere at the other end of it is a lumber camp. Beyond that I will trust to luck.

I have walked four hours through dense, hard wood, when a snake, lying in the path, sends shivers through me. It is not a venomous snake; there are none such in the mountains. Snakes may be all right in swamps, where malaria and typhoid and similar poisons abound, but here, in the pure air of the Adirondacks, they seem out of place. I have just crushed this one with a stone when there is a shout and I look up to see a flannel-shirted lumberman laughing at me.

Only the faintest trail leads from here through the forest northward. Maple and beech and birch and hemlock bend down their branches as if to hide it from the wanderer. It crosses the dashing Congamunck. Mink have left their tracks on the muddy bank. Deer were here this morning drinking. Fox tracks fairly cover the road, and a bevy of young partridges flutter up from the ground and look down at me from the leafy branches. I toss a grasshopper into the ripple; there is a splash and the insect disappears within the maw of a hungry trout. What a place for the hunter or trapper. Or what a place for the lover of wild things to come with note-book, glass and camera.

The path divides and I wander off for more than a mile on the wrong branch. Then it ceases to be a path at all, but I am repaid for the extra walk by the sight of a fox that leaps playfully away without seeing me. Now it stops and paws the ground. It is looking for mice; then leaps away again, the curves of its lithe body and waving brush an ideal for the esthetic physiculturist.

There are other tangles in the trail, and it grows late. The questions of supper and lodging present themselves. Will I eat to-night and will I sleep in a bed? It is questionable, but a sport must have its uncertainties or it is no sport at all.

Now it is dusk. The path goes up and up. On the right hand is a pond, and, beyond that, a mountain. Some bird is calling out there on the pond. There is a chirping in the branches above my head. A rivulet tumbling down the mountain seems very loud. The trees merge into a black mass and darkness has settled over the forest. There is an old hunter's shanty on the rivulet. I stoop and take a long drink. Then I enter the shanty, whose sides have begun to fall in, and lie down for the night.

There is a thrill in these long tramps; the thrill of freedom; the joy of defying railroads and steamers, stages and punctured tires. One feels that, after all, he is not the slave to convention; that he may throw rules aside, level mountains, conquer forests and annihilate distance. And this hard, earnest walking brings out one's philosophy. There is none of the philosophy of the cynic; one does not question for an instant that life is worth living. He is happy and life is good.

It is at such times that Nature whispers her most precious secrets.

Then came a night of sleep, pleasant sleep, with no disturbing sounds and no ill effects. In summer a night on the floor of a hunter's shanty need not be more unpleasant than one in your bed at home. If you are tired, you will not feel the hardness of the boards. If it is warm, your clothing furnishes ample covering. I wonder why men take so many blankets and so much luggage when they go camping in summer?

This stretch of thirty miles without village or settlement is not exceptional. West of Indian Lake, with the Cedar River for its heart, is another great tract of wild timber land. North and east of the same lake, toward Newcomb, is another, through which the upper waters of the Hudson wind their way. Still northward, toward the Saranac Lakes, is even wilder country. Through it flows Cold River.

This is the forest region of the Adirondacks. Draw a line from the village of Lake Placid, near the northeastern limits of the proposed park, to Forest Lodge on the Adirondack League Club's grounds in the southwest. South and east of this is the country of forests. North and west is the lake region. Here are lakes and ponds and chains of lakes. Here are rivers with rapids and carries; long trails for the canoeist.

From Blue Mountain Lake, on the east, or the Fulton Chain, on the west, he may pass into Raquette Lake, thence to Forked Lake, and down the fourteen miles of Long Lake to Raquette River, whence he may turn eastward into the Saranacs or westward into Big and Little Tupper. It is a wilderness journey. Forests line the shore of lake and bank of river. Mountains shoot upward through the forest and pour down their icy

streams to make the canoeist camping places, and to give him trout. Yet here on these very lakes, within a few hours' paddle of the remotest point, one may find hotels that look as though they had been transported direct from the metropolis or created in the forest by the magic of Aladdin.

Yet in the midst of this ideal wilderness the heart of the nature lover is saddened at the lumberman's vandalism. The lumberman is a good fellow to meet when you are hungry or when you do not know your way; but the Merrie Men of Robin Hood were said to be kind to those in distress. Wherever you go in the forest's depth or on the lakes and streams, you find tracts of land that will soon be robbed of their timber and left as barren "slashings." The State owns an immense amount of forest land, but it should own all. In the stretch between Lake Pleasant and North River I found three camps. The Cold River region is being "lumbered." Wherever lumbermen can get control of timber land they are busy cutting away every tree that will make a stick of timber or a bit of pulp.

The actual work of preserving the Adirondacks began in 1897, when the Legislature of New York created the State Forest Preserve Board and appropriated \$1,000,000 for its immediate use. The Board was authorized to procure by purchase as much land as possible within the boundaries of the Park. The law provided that land whose owners refused to sell might be taken, and the owners were directed to present their complaints to the Court of Claims.

The Board paid from \$1.50, the price of "lumbered" land, to \$7 an acre, and more than 250,000 acres were procured with the first appropriation. Later appropriations have enabled it to increase the State holding to something more than 400,000 acres. More than half of this is land that has not been lumbered, and still possesses its primeval wildness. There are some hundreds of thousand acres within the boundaries of the Park that will be protected from the timber cutter by reason of its being owned now by sporting clubs. With a generous appropriation from the coming Legislature, the Forest Preserve Board would be able to place a final ban upon the destruction of the Adirondacks.

In many Western regions fire has destroyed the forest that men attempted to save. But the Adirondacks are well guarded from this danger. Notices embodying the law in regard to fires for clearing land and for cooking are posted everywhere that a man can enter the woods, and the "protectors" of the Fisheries, Game and Forest Commission are ever on the lookout and ever empowered to call out whatever force of fire-fighters may be required. I saw not a single Adirondack region that had suffered from fires within the last decade.

Let the State save the trees, and Nature herself will manage the rest. Man has been defeated on every hand in his efforts to gain a foothold here. The whole region is a record of defeat. Wherever you find roads you find deserted clearings and abandoned houses. Men tried to farm and gave it up. Why? I have asked that question time and again. A glimpse at the stony little fields appears to give the answer. But here and there is an alluvial valley, clear and fertile, yet deserted. Corn will not ripen here on account of the frost. Wheat is not worth the cost of transportation to market. Hay brings good prices in the lumber camps, but the demand is limited and transportation, even to the camps, is difficult.

Other attempts to make this region produce wealth have been no less dismal in their outcome. On one walk of twenty miles down the valley of a mountain stream I passed four deserted tanneries. Once the business thrived and the valley was full of workers. But other regions, with better facilities for transportation, built tanneries, and these locked their doors forever. On half a dozen mountains are abandoned garnet mines. Here is a deserted paint plant and there an old graphite factory. All are closed. The grounds of the Tahawus Club, through which the Hudson dashes as a tiny stream from the foothills of Mt. Marcy, are the scene of a vast failure. Where the club's cottages stand was once a village of five hundred inhabitants. There are the old mine, the ancient roads and the great furnace where hundreds of men labored, digging and smelting the iron ore from the mountain side.

Such records of defeat are everywhere. In taking the region for one great breathing spot the State will injure no homes

and harm no industry save that which seeks to tear away the forest.

Nature has fought a good fight in preserving her haunt so near the heart of the world's great civilization; but man's cupidity is limitless, and he now seeks to tear from her very mountains their wonderful clothing of straight green pine, glistening birch and stately hemlock. So it is that the State is taking a hand in this struggle to save the Adirondacks as a trysting place for nature and her sweethearts.

With the Adirondacks preserved from the timber cutter and protected as at present from fires, the cities of the East will always have a playground within a few hours' ride. And this playground will never be crowded. Here will always be game and forests and wild nature. The outpouring of the cities in summer scarcely makes an impression upon the region as a whole. Hotels along the railroads receive most of the resorters. Hotels they are that range in character from the little country inn where you pay one dollar a day for board and may secure a liberal reduction by the week, to the palace whither you return from your day's fishing to a hot bath, and sit down to talk with the ends of the earth by wire and phone.

If you care to leave these behind, you may wander about for days in the interior without seeing a golf suit or a shirt-waist. I can take you to a little pond that winds in and out between two great mountains; it is scarcely wider than a good-sized river, but deep, and cold, and long. Deer come there to drink at night, and landlocked salmon grab for your trolling spoon; yet so far is it from the beaten paths that not a boarder has its single summer house sheltered during the whole past season.

Here and there in your interior wanderings you will find the preserves of some millionaires' club, miles away from the railroad, reached by its members after long drives at rates delightful to the soul of the liveryman. Now and then a single millionaire has his mountain home on some interior stream or lake. But these are only atoms. Centuries may roll away and atoms may congregate, yet the preserved North Woods will continue to offer a wild spot where man may forget his fellows and commune undisturbed with Nature.



A MOVING PICTURE OF DRIFTING CLOUDS ABOVE THE MOUNTAIN TOPS

THE MOUNTAIN GAME OF EUROPE

CHAMOIS STALKING

By W. A. Baillie-Grohman

A THIRD of a century or so ago when I was still potting my chamois with a light muzzle-loading rifle fit for boyish hands, an elderly relation asked me what I would do if I suddenly were to become the richest

The wealth of all the millionaires this and any other age has produced not only cannot add a single head to what Nature has designed as the *fera natura* upon which man shall prey, but in no other instance had, up to that time, the efforts of wealth and power been successful in saving a species from extermination. It is a fact quite beyond dispute that had the King of Italy, just forty-five years ago, not taken the measures he did in establishing in the mountains of Piedmont, a sanctuary for ibex, the forty or fifty specimens which then were the sum total left in the entire Alps would very soon have vanished for good and all.

Once an inhabitant of the whole chain of snowcapped mountains that form the continental backbone along which a giant could stride from Transylvania on the boundaries of Russia to the eastern confines of France, the incessant pursuit of poacher and king, of peasant and bishop had brought the ibex to the extreme verge of annihilation.

In Tyrol, the Steinbock, to use the German name, became extinct a century since, while in Switzerland the last representative was killed about two hundred years ago; for there, where all game was common property and no game-preserving nobility existed, the great knotted horns represented a proud trophy, the value of which in filthy lucre was equal to its weight in silver. It made the chase of the *bouquetin*, as the animal was called in the French-speaking cantons of Switzerland, an attractive one for the hardy peasants who dared to pursue this rare game into its wild retreat among the snow-fields and rocky barrens that were at that time untrodden by other mortal foot.

If ever a comprehensive history of the chase comes to be written—a task, by the way, as interesting as it is difficult—its pages will give abundant proof of the extreme ardor with which high-born and low-born pursued the noblest game of the Alps. Emperors and great church lords passed game laws that made the poaching of an ibex a crime expiated by the



Chamois Horns. The Top One is an Unusually Large Pair, Measuring 11 Inches in Length; the Others are Curiously Malformed Horns, the Malformation being in Most Cases Formed by Injuries from Falling Stones.

man in the world. "I would buy King Victor Emanuel's ibex preserves in Savoy!" was my prompt reply, and I do not know that the intervening decades spent in roaming after mountain game in the Alpine fastnesses of the old and new world have altered those juvenile wishes. To the pleasure of possessing that which no other man possesses, of being able to kill what no other man can kill, there would, in this instance, be added an even more supreme pleasure, viz.: that of exercising, as an unique privilege, the power of rescuing from the fate of complete extinction a species of big game that indubitably has occupied from the very earliest days the premier position in the estimation of sportsmen.

life of the *Wilderer*, and in one instance—that of the Prince Bishops of Salzburg—it was found that the prized game could be preserved only at such great loss of human lives that one of these great ecclesiastical lords, more humane than his predecessors, ordained that henceforth poachers should not be shot.

The result of this magnanimity, as was foretold, was that ibex in that particular region speedily shared the fate of their brethren, and to-day a very fine pair of horns hanging in the Fifteenth Century

speedy increase takes place when wild animals are protected against the machinations of man.

To-day there are said to be between 1,500 and 2,000 *bouquetin* in the Piedmont preserves, a small army of watchful wardens keeping guard over them with rifles that are kept loaded not only for show. It will take generations, however, for ibex to again people even the adjacent mountain wilds, for these animals are peculiarly exposed to a danger from which the hand of man cannot guard



Chamois Ground in a Peasant Commune in South Tyrol, Dolomite Region.

Council Hall in the quaint old town of Sterzing, close to what proved to be the last retreat of the ibex in Tyrol, are about the only relics left to us of the great bands of ibex that once peopled the Floittenthal.

To those interested in the preservation of American *feræ naturæ*—a topic which it is very pleasing to note is at last attracting the attention of many thinking men in America, the unqualified success of King Victor Emanuel's sanctuary has instructive interest, for it shows what

them, viz., avalanches, so that the increase is not as rapid as it would otherwise be.

Up to now ibex shooting has been a sport strictly reserved to the Italian royalties; in fact, I believe there are only a couple of men—two distinguished Austrian sportsmen—outside this charmed circle, who have had the chance of gratifying a wish uppermost in the heart of all keen *jäger*, and have stalked the great buck of the Alps.

On account of this exclusive character

which makes ibex shooting sport unattainable by the ordinary mortal, one need not fill much space, in what is intended as a practical description of Alpine sport of use to readers who may be tempted to try their hand at chamois and stag shooting,

tury ago, and when the reader is told that about twelve thousand chamois are annually killed in the Alps, of which about two-thirds fall prey to rifles of Austrian sportsmen, he will be able to form some idea of the popularity of this sport.

Of the two ways, stalking and driving, the former is, of course, the keener sport, for to be successful means to overcome the wiles of a naturally very alert and astonishingly agile beast, endowed by nature with exquisitely keen instincts of self-preservation. There is no fooling a chamois's scenting powers or its vision or its hearing, and as to its climbing prowess, some fairly tall stories might be told with perfect truth.

Stalking varies considerably, for in preserves where chamois are rarely disturbed and keen-eyed keepers are ever on the watch against poachers, any able-bodied man whose wind and muscles are still in fairly good working order can attain his end without running any risk of tumbling down precipices or losing himself in the wild uplands into which he penetrates. In good preserves chamois are numerous, and long immunity from pursuit has made them less watchful



Chamois Bucks Fighting for Mastership during the Rut in Winter.

with a long-winded account of a paradise which is beyond our reach.

To prevent mistakes, there remains to be added that the *bouquetin* forms a family by itself, quite distinct from the Spanish ibex and from the Tur or Caucasian ibex, of which there are again two, if not three, different sub species, while the Himalayan ibex, with its much longer, but also differently-shaped horns, forms another branch of a family that once peopled all the higher mountain-chains of Europe and Asia.

Of the chamois, much can be written, and so far as Austrian experiences go, they also point a most useful lesson respecting the efficacy of game preserving. There are to-day many thousand more chamois in the Tyrolese, Salzburg and Styrian Alps than there were half a cen-

than they are on ground, such as peasants or commune shoots, where every hardy youth in the nearest village, from childhood accustomed to a rough mountain life, is ever on their track. In such places, ten or twelve will be the sole representatives of their species, while on the same extent of preserved ground there would be ten times as many. To succeed in such places means not only to pit oneself against the native, born, so to speak, to the task, but also to overcome the superior wiliness of game constantly harassed by pursuers. It is as severe a test of skill and endurance as can well be imagined. Hence a single chamois killed under such circumstances is a feat to be prouder of than a score bagged in the ordinary way under the guidance of an experienced keeper, to whom every inch of

the ground is familiar, and who practically does everything but pull the trigger.

Permisson to shoot over the chamois ground belonging to communes is easily obtainable, a ten-florin note going a long way towards that end, and the fact that one's attempt to let one's Mannlicher or Mauser rifle end the career of a wily old veteran cannot very well be made without engaging a porter to carry one's belongings to the high-lying alp hut, in the hay-loft of which one's night quarters will be sought, will cause some more florins to be spent among the villagers.

Days may pass without getting within range of one's quarry, even if the weather be propitious, the wind steady and from the right quarter, and no *joddlng* shepherd perambulating the mountain-side in quest of lost goats or strayed sheep. The hay in the aforesaid loft may be of a deadly dampness, the cracks between the timbers of the wall of such size as to allow a white pall, the result of an early mountain blizzard, to settle upon one's bed, while the cows and goats immediately below the loft will form noisy and smelly bed-fellows, as successful in keeping one awake as are the other even more active though diminutive denizens of the hay into which one sank at first with such a delicious outlook of complete rest after the fatigues of a long day on the rocks.

The more game is harassed and constantly pursued; the more nocturnal in its habits does it generally become; hence chamois on such exposed peasant-haunted ground lie low during daylight and feed as much as possible only during the night. For this reason, one has to be on the ground before *büchsenlicht*—riflight—or, in other words, in the early dawn of day, when you can reach favorable places for spying without being seen by your keenly-alert prey, who is still feeding on its favorite herbs out on the bare rock. This will probably mean an hour's scramble through tangled woods by the dim light of a little lantern, and a correspondingly early departure from the hay-loft.

The natives have a boa-constrictor-like capacity of gorging themselves, and look upon a four-and-twenty-hours' interval between meals as no privation. Hence, as your companion polished off a huge frying pan of rich *Schmarn*, a Tyrolese dish made of butter and flour, the evening before, he is now busy completing his toilet

—a process which is simplicity itself, and consists of lacing up his huge iron-shod mountain boots, all the rest of his wardrobe having been on his body for an unknown number of days—ready to sally forth and walk the rest of that twelve- or fourteen-hour day without breaking fast.

This example I would advise the tenderfoot to eschew, for in that keen mountain air one's vital forces demand constant stoking, or pleasure becomes a toil. Hence it is a wise rule to have a cup of tea and a bite of something to eat ere you start out in the chill dawn. A plate of that self-same rich *Schmarn*, of which dish you found it impossible the evening before to eat more than a fourth of the allowance which your lusty peasant companion stowed away, washed down by a jorum of steaming tea, will make your search for that very early worm of a chamois a far more enjoyable task than were you to start upon an empty stomach.

The 3 a. m. breakfast disposed of, your pipe alight, your rifle slung over your shoulder and the stout *bergstock* firmly gripped, you sally forth from the lowly log hut, the cheery *waidmannsheil*—hunter's luck—from the lips of the sturdy lass who is the mistress of the mansion where you have passed the night, still ringing in your ear. A minute later you and your guide are lost in the dense white mist that hangs low over the ground, leaving visible the star-spangled sky upon which the first faint tinge of rosy light is about to herald the coming day.

The high grass and ferns through which you tramp are heavy with dew, so that your legs below the knee are wet through in a few minutes. Soon the same fate befalls the rest of the body, for your final approach to the point of vantage, from whence can be ventured a long shot at a bunch of chamois you sighted the previous evening, leads you across a patch of Larchen, or dwarf pine, of the peculiar density of whose growth only those who have attempted to force a passage can form an adequate idea. Finally, soaked to your skin, you reach the desired point commanding a wide vista of the corry below.

As yet it is too dark to distinguish with certainty those dark spots on the ashy-white rocks below, and while you patiently wait a quarter of an hour or so for better light, the keen breeze that ever pre-

ceeds sunrise freezes the marrow in your bones and makes your whole body shake and tremble with cold. Poor, indeed, seem the chances of hitting the minute little beasts some 250 or 300 yards below you. But shaking hands and fogged eyesight must obey, if only temporarily, the human will, and when finally the improved light has enabled you, by means of your telescope, to distinguish by the crook of the small black horns which of the three unconsciously grazing beasts is of the male sex, the fine bead of the Mannlicher repeater can rest for a second sufficiently steady on the dark body of your victim.

The great plunge forward which the animal gives the same instant that the sharp, dry crack of the nitro-powder rings out, and which movement in the welcome absence of all smoke is plainly visible to you, betokens that the aim was true, and that, in spite of a few giant leaps down the precipitous slope, the buck is as unquestionably yours as were he already safely ensconced in the capacious folds of the stalker's ubiquitous friend, the *Rucksack*.

The marvelous accuracy and equally useful flatness of trajectory of the Mannlicher has enabled you to achieve success

where probably on dozens of previous occasions the muzzle-loading rifle of the native *jager* has failed to bag that fine trophy over which you will presently be bending with such eager pleasure. In years to come, when the peasant youths will also be armed with these distance-defying weapons, chamois will become even more scarce than they are now on ground such as I have described. For, with these

weapons, distance is annihilated, and the point has been reached where accurate shooting can be done as far as the eye can reach.

That the meagre results and the somewhat rough incidents of sport such as I have attempted to describe are not exactly of a kind to attract the average modern sportsmen, need hardly be pointed out in these latter days when luxury and the lazy desire to achieve success with the least possible exertion have undermined many of the original principles of



Victor Emanuel Shooting at an Ibex in a Drive in the Aosta Mountains about Thirty Years Ago.

sport. Of Englishmen and Americans, I have met but two or three who, like good old Charles Boner half a century ago, passed their apprenticeship to chamois stalking under circumstances such as these; my friend, Mr. Winthrop Chanler, who has spent two summers at it, being one of these few among Americans.

THE FIELD FOR MOTORCYCLES

MOTORCYCLING VS. MOTORING

By M. C. Krarup

IF the line that separates motorcycling from "motoring" were sharply drawn, it would fall between two-wheeled vehicles on one side and three-wheelers, four-wheelers and automobiles in general on the other side; between bicycles and vehicles of different description. The decisive question would be whether the vehicle is supported by contact with the road surface at more than two points or requires to be kept balanced through the activity of the operator. No other distinction than that between vehicles of stable and those of unstable equilibrium will stand the test of analysis. But in accepted parlance the term motorcycle takes on a wider meaning, including all such motor tricycles and quadricycles the operators of which may assist in the propulsion by pedaling.

The arrangement for pedal action is the only definite construction feature by which a motor tricycle, or a quadricycle may be told from a three- or four-wheeled motor vehicle or automobile, and in the way of distinction it may be worth noting that in a motor bicycle the pedals may be dispensed with and the vehicle still remain a motorcycle or motor bicycle, on the strength of being, in all other respects, of the bicycle type; that is, balanced by the rider.

The motor bicycle—save the pacing machine, which is solely intended for race-track uses—has never been produced anywhere as yet in fully satisfactory form, and it is doubtful if it can compete with the ordinary light and convenient motorless bicycle as an instrument for sport and outdoor exercise, price also being considered. On the other hand, the motor tricycle and quadricycle compete with the light and low-priced motor vehicles of the carriage type, and it is well known that in France the perfecting of

the *voiturette* style has won over many previous devotees of the motorcycles: the steel tube framing and conspicuous display of the motor machinery of the latter have given way to the greater comfort and more stylish appearance of the bantam motor carriage.

In order to form a well-reasoned conception of the part motorcycling plays to-day, and will play to-morrow, in the spectacular but wholesome drama of American outdoor recreations, it is necessary to consider motor bicycles separately, and cast a glance at the special mechanical difficulties that arise when it is the object to reduce automobilism to its highest possible condensation in space and weight.

The mere question of price may in a certain sense be the making as well as the unmaking of motorcycles in their competition with automobiles upwardly, and bicycles downwardly, but compactness,



Mr. Field's Quad-Racing Cycle.

lightness and "handiness" form their *raison d'être*, and are emphasized to the straining point in the motor bicycle. It must be readily disposed of in or around a house without calling for special stabling facilities. It must be easily cared for,

so as not to demand any other or more highly skilled attendance than its owner can give it at leisure moments. It must, above all, be so constituted that the operator, under no circumstances short of serious breakage of vital parts, may get

more varied selection of recreations, social as well as physical and nature-communing, than the mere discharge of the nerve kilowatts of our muscular system. It is again a victory of mind over matter. It is a step from a modicum of pleasure



Two New Types of Autocycles.

hopelessly stalled with it on the road. If it can fill these requirements it can be sold at almost any price.

Imagination freely anticipates the practical results which skill and industry labor slowly to produce, and we have, therefore, all of us, an approximate conception of what the perfect motor bicycle would be like. We can picture ourselves in crowds traversing country roads at any desired speed. The hills have no terrors; the scorching sun is disarmed by the otium of our muscles; the feminine element is as agreeably permanent as at tennis, and pleasingly independent of either the forbearance or the gallant assistance of cavaliers. The byroads are as accessible as the highroads, thanks to the narrow path that the cycle so quickly appropriates on the edge of the tracks of common travel. The radius of pleasure excursions, of hunting and fishing expeditions, is multiplied by four; our holidays heretofore so frequently leaving a well-earned but undesirable sensation of physical lassitude, are turned to their proper purpose. The inanimate motor at a trifling cost has permitted us to spend our buoyancy on a

incidental to physical exertion to locomotion mentalized, expanded and subordinated to our purposes. It is another apple from the tree of knowledge and intended for Eve as well as for Adam.

But this is the ideal motor bicycle—in which the motive power is somewhat too miraculously unobtrusive and efficient. A look at the illustrations takes us closer to reality.

Numerous electric bicycles have been built, especially in Italy and France, but the weight of the battery has always condemned them.

Until some very radical discovery shall have been made by which the weight of electric power may be reduced to one-tenth or so of what it now is, electricity is out of consideration for motor bicycles, despite all its attractive properties.

The first notable American motor bicycle was constructed by S. H. Roper, of Roxbury, Mass., in 1869 or 1870, and was driven from a steam engine. It was in use for a dozen years. Later, at the age of seventy-three years, Roper constructed another steam bicycle, using the framework of the safety bicycle, which had then

made its appearance, and this is still fresh in the memory of many New England engineers, and embodied engineering features that stamp it as the prototype of the steam automobiles which have lately become popular as the lightest and most noiseless and odorless of motor vehicles.

It is related that Mr. Roper several times went with this bicycle from his home to the yacht club in South Boston, three and a half miles, and for the return trip merely cleaned the fire, replaced the same coal and got up steam, finding one charge of the tiny grate sufficient for the seven-mile trip.

To tend a furnace, however small, rake the coals and bank the fire for every pause in one's travels would hardly please the average seeker of recreation; and smokestack, waterglass and other paraphernalia of the steam engine are manifestly incompatible with those purposes of motor bicycles in which OUTING readers are interested. Every steam bicycle made in France has been a monstrosity to the eye, and as such also clearly disqualified; but in the steam tandems which made their appearance on our race tracks in 1899 there is visible progress toward sightliness and convenience. Still, they are heavily encumbered with machinery; they require absolutely the attention—the full attention—of two persons, one operator or engineer and one steersman. The smokestack and the grate are supplanted with a convenient automatic gasoline burner, but they must carry a large supply of water in order to sustain high speed and must be carefully and skilfully cleaned after each race.

Although more or less acceptable for track-racing purposes, they do not seem to offer much encouragement to those who are looking for the motor bicycle which shall combine mechanical efficiency with esthetic sufficiency. But by contrast they emphasize how uncompromisingly necessary the features of compactness, simplicity of operation and light weight are for the motor bicycle that shall occupy the popular field.

This point, indeed, escapes all contention, for everybody to-day admits that the future of the motor bicycle—barring inventions below the scientific horizon—is indissolubly entwined with the progressive development of the gasoline, kerosene or alcohol motor; in brief, the hydrocarbon or internal combustion motor, in which fire is supplanted by the electric spark, fuel and water supplies reduced to a minimum and the whole system of power generation closely comparable to that of a quick-firing, magazine-loading rifle.

The difficulty of applying power derived from successive explosions of hydrocarbon vapor mixed with air, lies principally in the fitfulness of this power coupled with the need of effacing this fitfulness and equalizing the effect on the vehicle wheels.

For stationary power purposes this is readily accomplished by the employment of large flywheels. In automobiles of the carriage type it is done, less thoroughly, partly by means of small flywheels and partly by increasing the number of ex-



The Trimotor.

plosions while relatively diminishing their force, this being done by using two, three or four cylinders, the explosions in which all work on the same motor shaft. But in motorcycles, and especially in motor bicycles, it is essential to have as little

weight to propel and as little machinery to gaze at, pay for and take care of, as possible, and in nearly all motorcycles it is found that the motor in accordance with these demands, has only one cylinder and little or none of the complicated gearing devices which play an important part

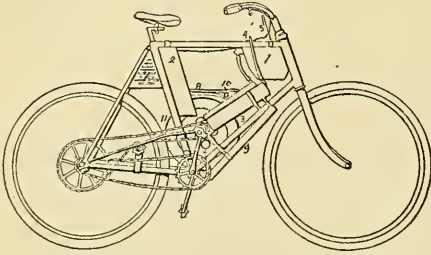


Diagram of a Motorcycle's Construction.

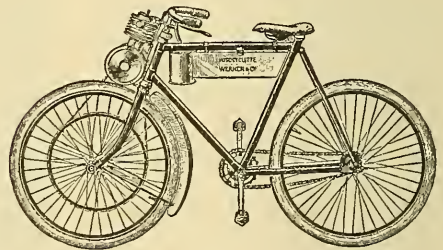
in larger motor vehicles of the hydro-carbon type.

The motorcycle operator is reduced to two expedients for moderating the thumping of the motor; he can reduce the effective power of the explosions by turning the electric spark so that part of the explosion will take effect against the motion of the cylinder piston, or he can let the vehicle go at full speed, assisting with his foot power, if circumstances permit. The first of these means does not reach the seat of trouble, however, except in so far as a small spasmodic power is less objectionable than a strong one. The spasms differ only in strength. But relief from this trouble may be provided by the manufacturer who will supply a small motor with high piston speed—rapid succession of explosions—and then gear down this high motor speed so as to largely reduce it before the power reaches the driving wheel.

This can hardly be done without sacrificing the highest speeds of the vehicle, and is therefore not a fashionable expedient at present, while a cult of high power and high vehicle speed is rampant, but when the motor bicycle shall take its place as a popular instrument for recreation it may be found useful and even necessary. It is perhaps the secret of the success of the motor bicycle in France, the motor running at a speed of 1,200 revolutions per minute, with a very large reduction to the front driving wheel.

All who have ridden motorcycles of this day have noticed that the ride is pleasant only so long as it is fast, while the vibrations grow obnoxious as soon as speed reduction makes the flywheel less effective and the intervals between explosions noticeable. To increase the momentum of the whole mass of vehicle and rider is the most available manner of equalizing the power, and herein lies perhaps an explanation of the passion for speed that takes possession of every motorcyclist, though he commence with commendable convictions in regard to the duty of a moderate pace.

People who are not carried away by a mere idea, but insist upon the elimination of crudities before giving vent to enthusiasm, will insist upon other means than those now in evidence to soften the application of power at any desired speed of progression. Many experiments are being conducted with this end in view, and among the most promising are perhaps those in which the explosion drives the piston against an air cushion, storing compressed air, which in turn is let loose to drive an auxiliary piston. So many are the able minds at work on these problems that it is permissible to hope for a speedy solution, or at least results that will point the way to final complete success. The intermediate stages, it seems safe to predict, will witness a large num-



A French Type of Motor-Bicycle.

ber of motor bicycles in the field which will be found acceptable to the male contingent whose fervor for sport is mingled with live interest in automobile engineering.

Among the greatest obstacles to rapid progress is the instinctive conservatism which views the motor bicycle as a "bicycle with motor attachment."

The fact that most who have produced motor bicycles so far have succumbed to the temptation of utilizing an ordinary bicycle frame, furnishes a strong indication that the problem has not yet been attacked in more than a tentative fashion, and, on the other hand, the results accomplished justify the expectancy that more determined and systematic efforts by a suitable combination of money, business methods and engineering resources, will soon be made and will advance the type beyond all needless resemblance to the safety bicycle.

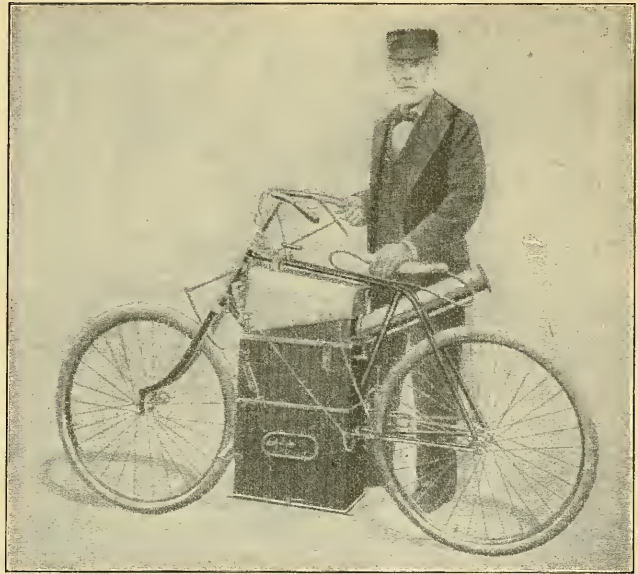
Neither the frame, the position of the rider, the steering method nor the circular pedal motion can be considered final and indispensable for the cycle idea.

The very first observation that obtrudes itself upon the beholder of the primitive motor bicycle is that everything seems to be out of place. The frame tubing is in the way of the motor appliances and the motor appliances in the way of the rider, or, at least, in uncomfortable proximity. Long rods, decidedly at variance with utility as well as with an attractive, clean-cut appearance, stretch across the whole frame. Weight is supported and heat generated in objectionable places. Operative manipulation of the motor is dangerously separated from steering and braking. Impeduniosity or vacillation is evinced in the efforts for making the vehicle convertible into an ordinary bicycle, or obversely, by catering to a supposed demand for a motor that may be attached to an ordinary bicycle.

This preliminary fumbling and groping bears testimony tending to prove that the financial world does not yet recognize the commercial future of the motor bicycle, or is engrossed in the enticingly large stakes which will reward substantial progress in the manufacture of larger and more costly automobiles.

A good idea of what a motor bicycle for ordinary purposes of pleasure riding

should not be, is gleaned from the gasoline motor tandem pacemaking machines which hold sway on the race-tracks. They are very efficient for their particular work, and they are not necessarily as noisy as they appear, their mufflers being usually removed to increase their power; and it seems to be accepted that the "teuf-teuf" which they tattoo as they spin along the oval, acts as an exhilarator upon the spectators. The necessity for comparatively high power, reaching three and one-half horse, gives them the looks of a war engine, and nothing has yet been accomplished to make it possible for one person to balance and steer them and also oper-



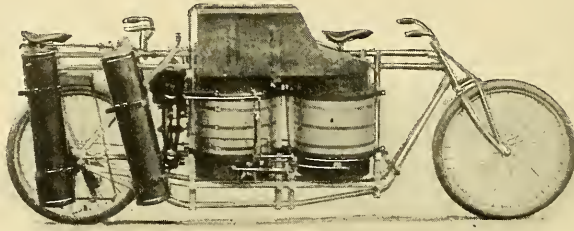
S. H. Roper and his Steam Bicycle.

ate the motor successfully. In this respect the motor tricycle has the advantage, inasmuch as its stable equilibrium leaves the rider free to attend the motors; and thus the anomaly is created that the motorcycle most nearly resembling a bicycle requires more complicated operation than the heavier type which approaches the carriage style.

One must look to a transformation and simplification of the motor-controlling apparatus, as well as of the motor bicycle frame and the rider's position relative to the motor, before it can be contemplated with composure to place a woman or a nervous man in the saddle.

In a French bicycle, which has been more extensively used in practice than any American production, there is recognition of this requirement by placing the

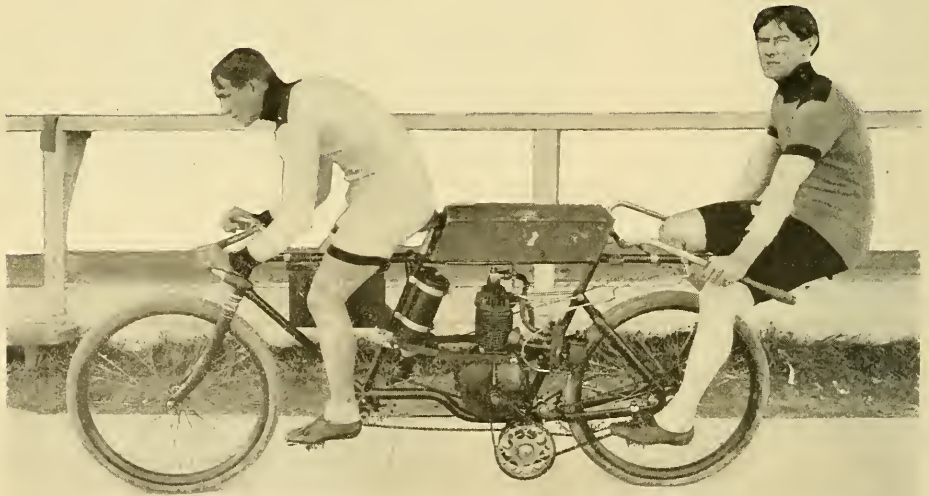
The motor tricycles and quadricycles, of which some illustrations are presented, are to all intents and purposes motor vehicles or automobiles in which a sufficient-



Steam Tandem. The Original Pacing Machine.

motor in front of the steering head attached to the swiveled fork and driving the front wheel. The control is within easy reach, close to the handle bar, and the freedom from encumbrance at the rear makes this type probably more esthetically satisfactory to the eye than any other now extant. Whether the odor from the exhaust is perceptible the writer is unable to say. The motor for this bicycle was sold

ly light construction to allow propulsion by pedaling, for starting or in emergencies, is attained by reducing the motor to a minimum of power and renouncing luxurious equipment and concealment of machinery. They command prices from \$250 to \$600, the favorite types selling at \$400 to \$450, and, chiefly through this feature of comparative cheapness, occupy an important place as a means for in-



A Steam Tandem.

in Paris during 1899 for about \$90, and the whole vehicle for \$180, and proved itself a very dangerous competitor of other motorcycles provided with higher power, in the *motorcyclette* races.

roducing automobiles of more pretentious character.

The price of motor bicycles, it is generally held, will be between \$125 and \$200.

THE CONSERVATION OF OUR FRESH-WATER FISHERIES

By Charles Minor Blackford, Jr., M. D.

THE early explorers of this country found the rivers and lakes abounding in fishes so fine in quality that the waters of the Old World could not be compared with them.

The records of the colonies show that the river fisheries formed a source of food and wealth to those engaged in them which almost equaled the products of the land; and yet these fisheries have already declined so greatly that their total extinction is feared.

It is strange that so little attention has been given to the causes that have produced this decline, or to efforts to check it. Our people have accepted it as a matter beyond human remedy, much as savages accept epidemics, and do nothing, or next to nothing, to remedy the evil.

As in any other evil, the best means of combating it is to discover its causes and then remove them; for effects cease when their causes are destroyed.

It has been assumed that over-fishing is responsible for the depletion of our streams. That this is true only in part, if at all, is apparent on the least investigation. The reproductive powers of fishes are so great that reasonable care will readily maintain a supply of the most hunted species, as the experience of the Old World shows, for the waters of Europe have been fished more exhaustively and for a longer period than have ours, and are still abundantly supplied.

Nor is this result due to the stringency of the laws or the shortness of the season, for, excepting for salmon and trout, neither law nor seasons existed until within quite recent years, yet all the fishes that delighted Izaak Walton are to be found to-day, and in the Onse, the Thames, and a hundred other streams, even in the waters near the metropolis, the angler finds his old-time sport.

Furthermore, let it be noted that nothing has been done by the State to stock these abundantly fished rivers and ponds, yet fish are plentiful.

On the other hand, the aid given nature by private and public means puts into

many American streams numbers of fry far in excess of the adults taken, but despite this the decline continues.

The expectations aroused when artificial fish culture was inaugurated have not been entirely fulfilled, and some hasty persons question the utility of fish culture at all. This seems to point to conditions in our streams unfavorable to the growth of fishes.

That these conditions do exist is unquestioned, and the problem for fishermen to solve is how far they may be changed. For instance, our streams are obstructed by dams that cut off access to spawning beds, and so restrict the numbers of the fry. It is argued with much force that, under the rule of "the greatest good to the greatest number," the mills and factories that get power from the dams are of greater value than the fisheries; they are "fittest" and should survive, and at most the loss of the natural spawning beds can be made up by artificial hatching, or much of the harm of dams may be overcome by fishways.

In the opinion of the writer, the great cause of the decline in fish life is the pollution of the streams, and for this there is neither palliation nor excuse. It is true that a brook or river is a convenient place into which to throw refuse. The people of mediæval cities thought the same of their streets until plague and pestilence taught them better and instilled the elements of hygiene into their minds. We consider such ignorant negligence a sign of their unenlightenment, yet, with all of our boasted civilization, we are but a step in advance when we convert our sparkling streams into noisome sewers.

The only excuse for such a foolish, short-sighted, almost criminal policy is that it is cheap, but even this excuse will not bear scrutiny. The cost in money, excluding the loss of human lives, that an extensive epidemic entails is largely in excess of that required for a rational system of sewage disposal, and in many places the material may be so used as to be a source of profit.

We annually import thousands of tons of fertilizing agents, while poisoning our streams and destroying one of our national resources by throwing away vast quantities of matter that is unsurpassed in fertilizing value. Certain European cities, under the pressure of a compulsory law were forbidden after the end of five years from its passage, from pouring sewage into any running stream. The consequent operations have been successfully carried out. There is no longer that form of pollution. On the other hand, they have demonstrated the value of sewage as an aid to agriculture, and it is not creditable to American intelligence that we should have conditions such as those that prevailed at Chicago before the opening of the drainage canal, or are still to be found in Philadelphia.

There is a prevalent opinion that, in some mysterious manner, water can purify itself of these noxious substances and become harmless. This notion, like many of the dogmas of ignorance, has little basis in fact. It is true that some of the organic material is oxydized and destroyed; but this is at the expense of the oxygen dissolved in the water, and when it is consumed in this manner there is so much less for the fishes.

The bacteria are not affected, however; and although many of these bring about the decomposition of the filth, they elaborate other products that are poisonous to many forms of life. The gases that come from this putrid mass are toxic in the extreme, and are destructive to the aquatic animals that must breathe them.

The condition of the Chicago River before the opening of the drainage canal is well known, yet within a week after the canal was put into operation a fish was caught in the river; the first since the great fire. If the Chicago River can be made to contribute its quota of fresh, good food to the hundreds of half-starved wretches along its banks, it will aid appreciably in offsetting the cost of its purification.

Sewage is not the only source of pollution, nor the only danger that confronts our fresh-water fishes. Some of these are almost necessary accompaniments of the development of the country, but others are permitted by a mistaken public policy.

Among these latter stands the practice

of mines, factories, dye works, and the like, of passing their waste products into any convenient stream, and creating a public nuisance to save themselves the cost and trouble of a harmless disposal of them.

Mine owners are allowed to wash ores in any neighboring river and to turn into it the waste water charged with poisonous matters, mineral and gaseous, that kill all living things with which they come into contact.

The gaunt skeletons of trees which are so conspicuous in the "coke regions" show the effects of sulphurous gases on vegetation, and the influence of mine water on fish life may be readily imagined. The heavy sediment covers up the gravelly spawning-beds and suffocates the eggs, thus inflicting injury on the fishes at the most vulnerable point.

The saw-mill is the "dearest foe" of nature lovers. Its insatiable maw has well-nigh devoured our forests, and, not content with the desolation it has produced in this way on land, it is ruining our lakes and rivers by sawdust.

Many who have not looked into the matter think that sawdust floats on the surface and is soon washed away, but this is not the case. It is soon waterlogged and sinks to the bottom, covering the pebbles among which fishes seek their food, and making a floor unsuitable for supporting the vegetation necessary for fish life.

This rotting mass of wood pulp fills the water with foul gases which drive away the fishes that are fortunate enough to escape suffocation, or loose particles of it hang in the gills and excite inflammation from which recovery is improbable.

Perhaps nothing imperils fish life in more ways than does sawdust, and the law should require the mills to dispose of it in some way that will not be a public menace.

Unless measures are taken to stop these wanton and wasteful practices, all efforts to increase the fresh-water fisheries are certain to be unavailing. Some of the measures already taken have been proven thoroughly inadequate, and until the sanitary conditions of our waters become such that a large fish population may again live in them, the decline of this valuable national resource is as inevitable as it is unnecessary and unwarrantable.

THE SPORSTMAN'S VIEW-POINT

By Caspar Whitney

Seventy-
Footers
a Blot on
American
Yachting.

Next to the year which bears record of Dunraven's insulting visitation, the present one has proved intolerably vexatious. Were it not for the brilliant racing success and sportsmanly management which have marked the competitive efforts of the smaller boats, 1900 would be written down as the most displeasing season in our yachting history since *Valkyrie III.* dropped anchor in New York harbor in 1895.

As it is, the seventy-footers will serve to make the year a reproach to American yachting. Structurally, they are a discredit to American yacht-building, and two of the four, *Mineola* and *Rainbow*—captained and manned by imported English crews—have resorted to tactics in racing which smack of the pit and the ale-house of east-end London.

There is, perhaps, no professional in the world filled with so many dirty tricks as the English professional; the class to which he belongs is a large one, and to the average individual a livelihood is as much a matter of alertness and wit as of skill and experience in the particular sport he follows.

Therefore, among the professionals of England, from the racing of whippets to the racing of yachts, the tendency to "beat the game" is apparent—and recognized.

This desperate struggle for existence among professionals in competitive English sport has touched with corrupting hand nearly every game in Great Britain, save cricket—and even that honored relic is showing some evidences of evil association. In yachting, the wiles of the professional skipper are many and of exceptional cleverness and audacity.

It is fair to credit Messrs. August Belmont and Cornelius Vanderbilt with some familiarity with these conditions at the time they engaged English skippers and English crews for *Mineola* and *Rainbow*. Aside entirely from the question of judg-

ment—even if patriotic motives were lacking—of seeking sailormen in foreign markets when the home talent has repeatedly proved to be the equal of any in the world—yachtsmen and, indeed, all native sportsmen resent the introduction of this polluting English trickster element to American waters which have hitherto been unsullied.

Appropriate
Conclusion
to an
Unwholesome
Season.

A season unique in jealous racing and in unlawful manoeuvring was therefore to be expected. Nor has there been lack of fulfilment. Between the alliance of the English professionals against the American amateur skippers and crews, in the early season, and the rivalry between the two English skippers in the late regattas, there was evidence in plenty of the strange new spirit.

First there was the inexcusable fouling of *Yankee* by *Mineola*, later the fouling of *Mineola* and *Rain-*

bow—in which the latter was disqualified although *Mineola* surely looked to be again the offender—and finally came the charge of dishonesty against Parker, the English captain of *Rainbow*, with the dis-



T. Traxton Hare,
Captain of U. of P. Eleven.

closure of his having surreptitiously ballasted his yacht after its official measurement.

Certainly the revelation provides an eminently fitting conclusion to such a season.

The Responsibility of Messrs. A. Belmont and C. Vanderbilt. There is, of course, no thought here or among yachtsmen of connecting Messrs. Belmont and C. Vanderbilt with the foul sailing of *Mineola* or the dishonest ballasting of *Rainbow*. Mr. Belmont delegated racing control of his boat to his English professional—Wringe; and Mr. Vanderbilt published his reasons and relinquished the prizes *Rainbow* had won—the Lipton Cup among them—as soon as he learned what his captain had done.

Yet it is true, that in so far as an owner of a ship, or a bank, or a landed estate, is responsible to society for the good conduct of his employees, so far are these gentlemen responsible for the conduct of their yacht captains. And there is no doubt whatever that they are answerable to American sportsmen for the introduction of the English professional trickster element—of which every sport in this country, save horse-racing, has hitherto been free. Furthermore, neither of these owners can fully escape criticism—on

Mr. Belmont is an expert Corinthian, and knows when a boat is being handled foully. Mr. Vanderbilt is inexperienced—but the plea of ignorance is not admitted before any bar of justice.

The prominence of these two men makes their responsibility the greater, since their example and its influence are the more far-reaching.

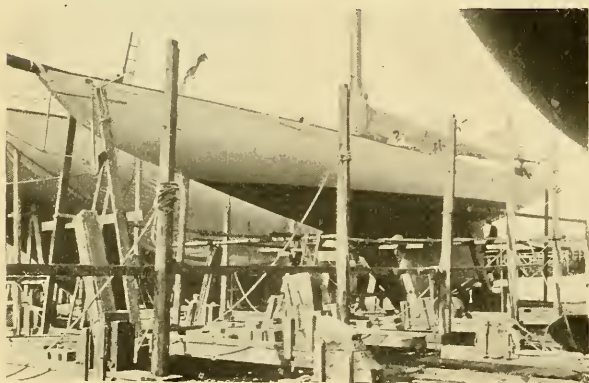
Not the least regrettable feature of *Rainbow's* degradation is that the *contretemps* should involve the \$1,000 cup which Sir Thomas Lipton offered for a race among the seventies, and for which *Rainbow* (ballasted to no one knows what racing length) beat *Mineola*.

It's a sorry return for so sportsmanly a tender.

**"Yankee"
Entitled
to Honors
of 70-foot
Class.**

Although *Mineola's* racing record numbers more prizes than any other of the seventy-footers, it also shows that she started in the largest number of regattas. Taking all things into consideration, the honors of the season seem very justly to belong to *Yankee*, whose racing career from first to last has been most commendable in respect to both performance and sportsmanly management. In the very beginning of the season she was a perisistent winner; from the wrenching she sustained in the little seaway off Newport, which disclosed the shameful structural weaknesses of the class, she seemed to recover less completely than some of the others, for though she won the Class Cup, her form ever after appeared to suffer. The success of *Yankee* is the more gratifying because of her having been handled at all times by her owners, Messrs. Herman Duryea and H. P. Whitney, and manned by a native crew.

Virginia had her moments of triumph, but for the greater part she drew blank. Perhaps the twisting she received in that puny seaway, already mentioned, was answerable, but at all events the boat was the slowest of the class. Her owner, Mr. W. K. Vanderbilt, Jr., who was also her captain, deserves better luck, for his assumption of the command of his boat and adherence to native sailors was sportsmanly.



Rainbow in Dry Dock.

Mr. Belmont's part for tolerating such handling of his boat, and on Mr. Vanderbilt's part for his ignorance of rules and indifference to his individual responsibility.

**Sending
Good Money
after
Bad Money.**

Now that the season is over, the structural deficiencies of the seventy-footers are to be repaired, and the extent of those deficiencies is suggested by figures, ranging from nine to twelve thousand dollars, which it is estimated are needful to make seaworthy boats out of the flimsy things the Herreshoffs delivered last spring to the Messrs. Duryea, Whitney, C. and W. K., Jr., Vanderbilt and Belmont.

It is rather a profitable business for the Messrs. Herreshoff, but I wonder how the Messrs. Duryea, Whitney, C. and W. K., Jr., Vanderbilt, and Belmont fancy the idea of sending good money after bad money?

The bows of all the seventies must be removed, and that part of the fore-body where the fin-keel joins the shallow upper body practically rebuilt. This means removing the planking, perhaps so far back as the mast, taking out the frames that they may be returned to their original curves, and thoroughly strengthening the entire hull.

No doubt the yachts can be repaired so as to provide against their bows twisting out of shape, or their seams opening in catboat weather—as happened off Newport—but no amount of patching will save them from being written down as monumental failures, structurally speaking. Nor can a seventy-foot yacht, which dare not venture into water a thirty-foot sloop enjoys, be called anything but a failure from a racing point of view.

**Designer
Watson
Learns
Something.**

The newspapers have been recently printing a great deal anent the coming of a challenge from Sir Thomas Lipton for *America's Cup*—and now finally there is tangible evidence that we shall see an international race next year. Sir Thomas had given no hint to any one on this side the Atlantic of an intention to challenge, though the English press, with a strange and unaccustomed activity, warmly urged his doing so.

Americans will be glad to have the challenge, and more than pleased for another opportunity to welcome Sir Thomas; but we are amusingly mystified by the unusual urgency with which the habitually sedate London journals have

pressed the matter upon the keen-witted owner of *Shamrock*.

The prospect of a challenge seemed to be not promising. The English yachting season just concluded was a disappoint-



Rainbow, Bow On.

ment from a racing point of view—though it will gratify yachtsmen to hear that the cruising classes were exceptionally well filled and provided abundantly good sport.

But the most significant event of the English season, and no doubt, as touching international racing, the most disappointing—was the sailing of *Sybarita*. It was an open secret that in designing this yacht Mr. George L. Watson introduced some highly-prized experimental features which, if successful, were to be utilized in the lines of a new *America's Cup* challenger. The result, however, was not happy. If *Sybarita* was not a failure, at least she proved a distinct disappointment—as a type likely to show exceptional speed. There was nothing in her rig or movement through the water to suggest especial advantage. It is to be doubted whether she could beat *Shamrock*.

If, in short, *Sybarita* showed anything to Mr. Watson, it was how *not* to design the next challenger.

**Raceabouts
Schoolships
for
Yachtsmen.** Despite the seventy-footers, the yachting season was made notable by the development and prosperity of the small boat. And so long as the classes for the small boat continue to grow and thrive we can view failures in the larger classes with complacency. For the small boat—the raceabout, knock-about, and others of that species—is the cradle of Corinthianism. It is the schoolship of American yachtsmen—or, at least, of the kind of yachtsmen we seek to de-



Jolly Roger, Champion Raceabout.

velop. Unfortunately, not all the men who own sailing yachts, or who pretend to sail their own boats, are yachtsmen, but the average of skill is annually increasing, and the fact is directly traceable to the growth of interest, within recent years, in the small boat. Yacht club regatta committees should bear this well in mind, and at all times lend every possible encouragement to the smaller classes.

As the most active centers of the small boat's progress, it was proper that the respective champion raceabouts of New England (Boston) and Long Island Sound waters should meet in a conclusive series. It was also entirely proper that Boston's champion, *Jolly Roger*, should prove the winner, for New England has been a faithful and an encouraging patron

of the small boat since long before the days of the Cape Cod Cat—a more seaworthy and thoroughly serviceable boat than which, let me interpolate, I have yet to discover. It is natural, too, that Boston should have developed a class of Corinthian sailormen of a higher average of skill than may be found elsewhere.

At all events, *Jolly Roger*, owned and designed by Mr. B. B. Crowninshield, of Boston, and sailed by Mr. Frank Crowninshield, came to Long Island Sound at the end of the season and beat Mr. Johnston De Forest's champion, *Scamp*, sailed by Mr. A. E. Whitman, in two straight races; subsequently beating also Mr. H. M. Crane's *Raider*. *Jolly Roger* not only out-footed her competitors, but was more smartly handled. Having also designed *Scamp*, Mr. B. B. Crowninshield must be highly gratified with his season's successes.

**New Racing
measurement
Rules for
Small Boats.** Apropos of the successful small-boat season, the Yacht Racing Union, which administers to its needs, at a recent meeting very properly expressed official disapprobation of the racing measurement rules extant, and decided to rescind the present rule until a new one is put forth. Meantime, Union clubs may "use locally such rule of measurement as they consider most desirable for the purpose."

There is no doubt of the need of a new rule, but nothing will be gained if the proposed changes do not provide a penalty for "freaks" so heavy as to insure healthful life to the small boat.

In the extremes to which the "freak" development were carried in the Seawan-haka-Corinthian Challenge Cup class, the Union committee has ample warning. The tendency to create a mere racing machine must be checked and thoroughly discouraged. The racing-machine craze has eventually killed every class of boat sailing, small and large, in which it has been tolerated.

The races next year for the Seawan-haka-Corinthian Cup, which the Royal St. Lawrence Yacht Club (Toronto), successfully defended last month against the White Bear Sailing Club (St. Paul), will afford an opportunity for seeing to what degree of skill the English have attained in small-boat building and handling, since

Spruce IV made a try for the same trophy and was beaten, several years ago.

The St. Lawrence Club has just accepted, through the Island Sailing Club, of Cowes, the challenge of Mr. Lorne Campbell Currie, of Havre, France.

The Sport-Giving Thirty Footers There never has been a class of small boats to equal the thirty-footers in evenly-matched or sport-giving racing. For three years this class has furnished undiminished enthusiasm and exciting contests off Newport, and there is every indication of its being good for three more years. Some of the boats have changed hands since launched—but their speed qualities have not been lessened thereby; indeed, in one or two instances they have been considerably improved.

But the most valuable service of this class, as of the raceabouts and knockabouts, has been its missionary work among the younger generation of amateur sailormen, and with very happy results. In the first year of the class the majority of the boats had professional skippers, but this last season amateur talent was overwhelmingly in the majority—and also in the lead. Incidentally I may add that the groundwork for the skill Mr. Herman Duryea exhibited this year on *Yankee* was acquired during the several seasons' racing on one of these thirties—*Vaquero*, I think, was his boat's name.

The past season was an especially popular one for the thirties—for not only have the owners but a number of their friends also offered cups, and great interest has been taken in the racing. Of the fifty-eight races sailed this year twenty were for cups. The season's record follows:

Boats.	Starts.	1st.	2d.	3d.	Points.
<i>Wa Wa</i>	54	18	12	3	69
<i>Dorothy</i>	50	12	8	3	50
<i>Vaquero III</i> ...	42	6	7	7	36
<i>Hera</i>	36	6	7	3	35
<i>Esperanza</i>	40	8	4	7	33
<i>Pollywog</i>	48	5	5	8	30
<i>Asahi</i>	28	2	1	4	12
<i>Veda</i>	8	1	4	2	12

Thus *Wa Wa* finishes the season as champion and wins the Paget Average Cup, which *Caroline* carried off in 1899. *Wa Wa* is owned by Mr. Reginald Brooks, and has been sailed by him in all her races. Her record is perhaps the most notable yet made by one of this class; she

has missed only four races and closes the season with thirty-three winning pennants.

New Class Promised. A class of which not a great deal was seen this year, perhaps because we were so busy with the wretched seventies, but which seemed to promise much good sport if properly developed—was the 51-footers—as represented by *Altair* and *Shark*. Both of these yachts were on the



Wa Wa, Champion 30-Footer.

New York Yacht Club cruise, and each made a very creditable showing; subsequently *Altair* made a commendable record against the famed *Syce*, but *Shark* retired to Boston waters and did not further reveal her capabilities.

At all events, enough was seen to attract attention to the good looks of the boats, and their economical and workmanlike construction. Now there is talk of several more being added to the class next spring. I hope the talk will really result in action. The more boats we add to the fifty- and sixty-foot classes, the better it will be for American yachting—always provided, of course, that the new boats are real yachts and not the flimsy racing skeletons which constituted the seventy class. The 51-footer is one of the most satisfactory sizes; it gives a yacht plenty large enough for average cruising and yet not so large as to be unwieldy and expensive in racing.

**Small
Boat
Flourishing
on Pacific
Coast.**

It is interesting to compare the winning types of Atlantic Coast small boats, as represented, for instance, by *Jolly Roger* and *Wa Wa*, with the small sloop *Aeolus*, which on the Pacific Coast is equally as famous. It is plain to see that she is much abler and more seaworthy. She is not so speedy by a great deal, no doubt, but, on the other hand, she is more of a yacht and less of the racing machine.

San Francisco Bay has quite a respectable fleet of boats in about this class, and an annual race of great interest among them for the Perpetual Challenge Cup,



Aeolus.
Pacific Coast Champion.

which the San Francisco yachtsmen purchased in 1895 by subscription, and which was first won by J. W. Leonard's *El Sueno*. Any recognized Pacific Coast club may challenge for this cup, and the race must take place between May and November. So long as she is within 10 per cent. of the racing length of the defender, the challenger may be of any length, rig or build; which seems a very simple way of solving what is usually complicated through many labored provisions.

Aeolus is owned by Messrs. Carl Westfeld and R. H. Morrow; she won the

McDonough Cups (corresponding to our former Goelet and present Astor trophies) in 1898 and '99, and the Perpetual Challenge Cup in '97 and 1900; she is unquestionably the fastest boat of her size on the Coast, but there are other good ones—notably Mr. Matthew Turner's *Gadder*, champion in '99; and ex-Commodore J. W. Pew's *Truant*, which was beaten last year for the Cup by only a narrow margin.

There is no section of the United States where there are such exceptional facilities for small boat sailing as in San Francisco Bay, or any environment so beautiful. Yachting in these waters is a feast for the eye, as well as solace to the soul. If its esthetic possibilities are not always appreciated by the local sportsmen, at least they recognize the yachting opportunities, and are taking increasing advantage of them.

**Encourage
Scientific
Rifle
Shooting.**

The Sea Girt tournament of the New Jersey Rifle Association was not remarkable this year in its showing of scores. In fact, the average at Creedmoor, as well as at Sea Girt, was not so high as in other years—which does not reflect creditably upon the work being done at rifle practice by the National Guard of at least two great States, New York and New Jersey.

Yet the Sea Girt tournament was particularly notable for the number of competitors in both team and individual events, and, as it has before, serves again to raise the query, why there are not more such tournaments. The annual State rifle practice is very well in its way, but it does not bring out the same qualities as the competitive open tournament, nor provide the incentive for unusual effort. Americans seem naturally good rifle shots, yet we secure not half the needful practice.

At Sea Girt, the President's rifle match was won by Captain Whittemore, Fourth N. J.; the revolver championship by A. L. A. Hunningright; the military revolver championship by Dr. R. H. Sayre, and the pistol championship by G. H. Taylor.

The Spanish and the Boer wars so convincingly demonstrated the incalculable value of marksmanship in the man behind the gun that the lesson must never be lost to mind. Scientific rifle-shooting should be encouraged by States in every possible way; more tournament practice pre-

scribed and more expert knowledge required of the militia, that there may be no hopeless confusion between theory and practice.

**Uniformity
of Arms
Essential.**

Above all, there should be uniformity in arms throughout the militia of the Union and smokeless powder.

A bill has been introduced to Congress authorizing the Secretary of War to issue the 30-caliber rifle to all State Governors making such requisition, and it looks as if the militia of the United States would shortly be armed, as it should be, with the gun used by the regular army.

It is remarkable, after the unhappy experience in Cuba of the 71st New York and the 2d Massachusetts regiments, with their Springfield black-powder rifles, that the change to the smokeless powder, small-bore, high-power rifle has been so long in coming. At present the militia is armed with an obsolete gun, and in case of need could be of no more service than it was in Cuba, with the same antiquated rifle.

The New Jersey State Rifle Association has been the first to adopt Krag-Jorgensen 30-caliber. It secured 100 of these rifles, and they were used at the recent tournament by the expert shots of the militia. But it takes considerable practice to do good work with these small caliber rifles. In case of a sudden change from the Springfield to the Krag, the regiment sent afield would be more dangerous to itself than to the enemy.

**National
Rifle
Association.**

Because of the many conflicting conditions enveloping the National Guard and of the deeply-felt need of some organized encouragement of rifle-shooting—the National Rifle Association of America, recently formed, is a movement of national concern. It has a wide field and one not entirely free of obstacles, but its mission must engage the sympathetic attention of every citizen of this Republic.

The officers have been wisely chosen, and include: President, General Bird W. Spencer, New Jersey. Vice-presidents, General George H. Harries, District of Columbia; General John S. Saunders, Maryland; Colonel James M. Rice, Illinois. Treasurer, Nathan Sperring, Pennsylvania. Secretary, Lieutenant Albert S. Jones, New Jersey, while the Rules

Committee consists of Lieutenant-Colonel N. B. Thurston, New York; Major Frank L. Kimball, New Hampshire; Major Louis Rawlins, Maryland; Major James E. Bell, District of Columbia, and Colonel Charles A. Reid, New Jersey.

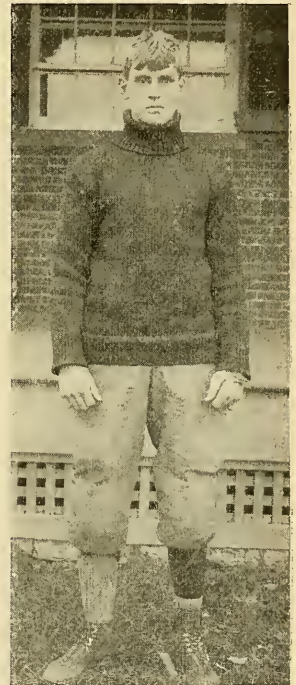
With men so widely chosen and of such apparent fitness for office, the Association begins life under the most favorable auspices. It remains only for it to really work, and to work in harmony.

**Under
His
True
Colors.**

John Rumohr, the oarsman, has publicly announced his intention of turning professional. Rumohr is the Canadian, who, as a member of the Harlem Rowing Club, recently won, by default, the amateur sculling championship of the National Association of Amateur Oarsmen, because the holder of the title, E. H. Ten Eyck, at the last moment failed to make good his entry.

No surprise is occasioned by Rumohr's decision—it was due to follow in the natural course of events—and I commend his honesty in hoisting his real racing colors. But the occurrence brings freshly to mind the course of the National Association, which has not only treated Rumohr with gross injustice, but shown skulking cowardice since first question of Rumohr's amateur status was raised.

They have had ample notice, they cannot plead even ignorance. The conditions were matters of such common report that it was impossible to avoid knowledge.



H. W. Pell,
Captain Princeton Eleven.

An
Insult
to
American
Rowing.

The Canadian came to New York under the ban of his home rowing organization; he had been disqualified for throwing a heat of a race. The American Association knew this, yet permitted Rumohr to enter the National regatta; permitted him to become the amateur champion sculler of America!

But having allowed Rumohr to win the amateur championship of America, this National Association declined a day or two later—when Ten Eyck refused to sail unless his father and a friend were also given free transportation—to consider the Canadian as an American entry in the Paris Exposition regatta, because of his questionable status!

Rumohr was pure enough to enter a race for the American championship, but too tainted to be taken on the National

Association's Personally-Conducted junket to the Paris regatta for second- and third-rate crews.

Meanwhile, no action one way or the other was taken on the Canadian oarsman; the Association simply let escape insinuations concerning his amateur status—and then its



Gordon Brown,
Captain Yale Eleven.

team sailed away on the money raised through subscription by oarsmen to send representative crews to the so-called world's regatta at Paris. Meantime, too, no action was taken concerning the contemptuous manner in which Ten Eyck had treated the Association. Nor has the Association made any visible effort whatever to either substantiate its implied dis-

trust of Rumohr's amateur status, or, in the event of having done him an injustice, to set the Canadian square with American sportsmen.

What can be expected from a sport governed by an Association of such pusillanimity?

It is quite in order now for E. H. Ten Eyck to follow the commendable example of John Rumohr, and hoist the colors which are and must ever be nearest his heart.

What Polo
Really
Needs.

The midsummer polo tournaments, especially the one at Newport, were not attended this year by their usual éclat.

Entries were unusually few, and play quite on the scratch order. But the cause is not to be traced to faults in the handicap system—which I note is the very absurd reason advanced by some superficial observers. On the contrary, the handicap system has been the very up-building of the American game; to abandon it would be to reduce tournament play to a few annual matches among the top class—for there are only a few teams on level terms.

The causes for the polo lethargy are: (1) other interests which happen this season to have distracted the attention of some of the players, (2) toleration by the Association of the migratory player, which disrupts club loyalty and hampers the development of the second-class material, and (3) that certain jealousy, and, I must say, lack of sportsmanship which to a greater or less extent, is nearly always in evidence among the polo set.

What polo really needs is a strong Association Executive Board that will handle the game on a broad sporting basis, rather than as the entertainment committee for a few clubs. There are too many mug-hunters among polo players, particularly around New York, and too pliant an Association for the game to thrive as it should.

Myopia
Gets a few
Pointers.

The only notable events of tournament-play since the championship, have been the three defeats of the champion Dedhams by Myopia. But this was not so much due to the exceptional play of Myopia as to the weakening of Dedham through the loss of Mr. Goodwin, who was laid off by his physician for the season shortly after the National tournament. Nevertheless, Myopia has shown

considerable improvement; they have been learning some things this season—notably, not to carry the ball around the field so much—which have bettered their game a good bit, and I expect to see the team occupy a higher place next year than since its heyday three seasons or so ago.

Dedham has a lot of good material coming on, and will also be better in 1901. Philadelphia is also going along; in fact, all of these are pulling away from New York, where there is too much seeking for individual glory to permit of winning team play.

**Polo
Pony
Breeding
Handicaps.**

Another requirement of polo it seems to me is official unity in encouraging breeders to develop and perpetuate a polo pony type. It has been said by those who merely dabble in these subjects, that the breeding of good hunters and of polo ponies is a matter of chance, and that the best in both classes are happy accidents. But that, of course, is all folderol. No accidental good thing can repeat itself in breeding; and it is, of course, absurd to say that the grand hunter type of England, and especially of Ireland, just "happens."

What has been done, and is doing, in hunters, can be done in polo ponies, and, in fact, is being done by a few breeders in England—and in America, by Mr. T. C. Patterson, of Philadelphia.

The great difficulty which stands in the way of high-class polo-pony breeding in this country is a want of sympathetic co-operation on the part of the players, due (1) to their very superficial knowledge on the subject, and (2) to an obvious lack of real concern for the game. A considerable percentage of the men who play polo do so because they view it as something of a short cut to notoriety, social, newspaper, or otherwise. The genuine love of the sport is absent, except among a comparative few. Therefore, little thought has been given to the breeding question, and annually polo stables are recruited from the car-loads of broncos shipped from the Southwest.

Now, I yield second place to none in respect for the splendid qualities of the bronco; on his native heath he is absolutely the mount *par excellence*, and even in strange environment he becomes an enduring and adaptable servant. But in polo the bronco must be considered a

makeshift; one which, to be sure, often answers present needs very acceptably, but a makeshift none the less.

If the Polo Association and its Executive Committee took a serious and broad view of the game and its permanent American prosperity, they would establish a polo pony society and a carefully edited stud-book for the express purpose of encouraging breeders to produce riding ponies of what we may call the polo type. The object of such a society would be to gather the experiences of various breeders and to make the success and the failures serve in turn as encouragement and warning.

At present, as I have said, I know of but one establishment in this great country where the breeding of the polo pony type is being carried on with judgment and success.

The day
New of the
World's t w o-
Trotting minute
Record. trotter
appears to
be approaching,
but so slowly
that I doubt if
any of us will
live to view its
dawn. No doubt
it will come
with the age of
transatlantic
balloons and
clean politics.

It is now six years since the bay mare Alix startled the world by taking one-quarter of a second off the 2:04 record which Nancy Hanks had created in 1892. Since that day the average of trotting speed has been greatly increased by breeding, by the deep study of gaits and by the

use of specially prepared appliances—



C. D. Daly,
Captain Harvard Eleven.

such as hobbles for example. In the matter of tracks—there has been no improvement, and the bicycle sulky, which somewhat revolutionized records, remains about the same.

The reduction of the world's trotting record (sulky) to 2:03 $\frac{1}{4}$, therefore, by The Abbot (September 25th) must be regarded as one of the most notable of modern trotting performances; the fact of it having been accomplished on the same track (Terre Haute) where Nancy Hanks made her record makes it the more remarkable.



The Abbot,
World's Trotting (hobbled) Record, 2:03 $\frac{1}{4}$

The Abbot is a bay gelding by Chimes, dam Nettie King, 2:20 $\frac{1}{4}$, by Mambrino King; was foaled in '93, and bred by Messrs. C. J. and Harry Hamlin at Village Farm, East Aurora, N. Y. He has been a most consistent performer in recent years (though as a youngster he was most difficult to handle) and closed last year's campaign unbeaten in the ten races in which he started, and with a record of 2:06 $\frac{1}{4}$. This season he was specially prepared for record work, and has responded nobly to the calls of his driver-trainer, Mr. E. F. Geers, than whom there is no reinsman more skilled. On the Empire City track, New York, just before going to Terre Haute, The Abbot equaled the world's sulky record of 2:04,

and established the best wagon mark of 2:05 $\frac{1}{4}$ for trotters — a performance no less remarkable as showing the wonderful stamina of the horse.

Notable Amateur Reinsmen. While the professional drivers have been accomplishing great things this year, the amateurs have also been earning a goodly share of the season's honors. Mr. H. K. Devereux, of Cleveland, Ohio, has driven his stallion, John A. McKerron, by Nutwood Wilkes, to a world's amateur trotting record of 2:09; Mr. C. K. G. Billings, of Chicago, has scored twice handsomely; first in driving his mare Lucile, by Brummel, to a world's (wagon) record for mares of 2:07; and again by driving his horse Hontas Crooke, by Budd Crooke, to a world's record of 2:04 $\frac{1}{4}$ for pacers.

Another very important trotting performance, second only to that of The Abbot's, is the mile of that great horse Cresceus, by Robert McGregor, in which, driven by his owner, Mr. George H. Ketcham, of Toledo, Ohio, he reduced the stallion record of the world from 2:05 $\frac{1}{4}$ — previously held by Directum, by Director—to 2:04 $\frac{3}{4}$. Both of these world record-holders, The Abbot and Cresceus, carry strong infusions of the blood of Hambletonian 10, Mambrino Chief and American Star.

M. W. Long's Record-Breaking Performance. In fact, it has been a season of marvelous record-making on both turf and cinders. Whatever glory The Abbot has placed to the credit of the quadruped, with his one-mile trotting figures, Mr. Maxwell W. Long, Columbia and New York Athletic Club, has fully equaled for the biped, with his truly marvelous performance of running a straightaway quarter-mile in 47 seconds. It will probably be many a day be-

fore the performance of either man or horse is equaled—not to say surpassed.

As in the case of the mile trotting figures, the quarter-mile world's record has stood for a number of years—to be precise, since July 1st, 1886, when Mr. Wendell Baker, Harvard, ran a straightaway quarter against time on Beacon Park track, Boston, in $47\frac{3}{4}$ seconds. In those fourteen years there have been several attempts to lower Mr. Baker's record, but the only athlete to get within hailing distance of it was Mr. W. C. Downs, Harvard and N. Y. A. C., who, July 9th, 1890, on the Beacon Park track, ran a quarter in $47\frac{2}{5}$ seconds, but was never given the record through the bungling of his club, under whose auspices the trial was made, and some hocus-pocus of the officials in charge, which has never been fully explained to this day. Mr. Downs was, however, given the 400-yard record of :43, which remained the world's figures until Mr. Long changed them the other day to :42 1-5.

The performance of both men at this distance excels the professional figures which are :44 4-5 made by A. R. Downer (whom we saw in this country as an amateur on the London A. C. team), in February, '97. Downer still holds the professional record for 350 yards of :36 1-5, but Mr. Long in his quarter-mile dash for fame also established world's amateur figures of :36 2-5, thus beating the old record of L. E. Myers, which was made at Philadelphia, and has stood since October 15th, 1891.

Mr. Long's great running was done at the old Guttenberg track, which presented a hard path after the loose surface had been scraped off, and a runway showing a slight incline for the first 300 and as slight a decline for the last 100 yards. If there was an advantage, therefore, it did not favor the runner. The trial was held under the supervision of competent officials, Mr. James E. Sullivan being referee, with qualified and experienced timers. Extraordinary as the performance is, there can be no doubt of its authenticity.

The
Physique
of
Sprinters.

The great speed and sustained effort of an athlete so heavily built as Mr. Long, again raises that much-discussed question as to there being a distinguishing physique among sprinters. Personally, I have always believed this question,

like many others, to simply afford opportunity for theorizing with no convincing doctrine resulting. Certainly, study of the great sprinters of the world provides no evidence of a dominant type of physique.

Lon Myers—who remains the greatest all-round performer, despite the grand running since his day, including that of Long—weighed only about 110 to 115 pounds in the heyday of his work, and was 5ft. 7in. tall. Wendell Baker was a half-inch less than 6ft. tall and weighed 134 pounds; yet Long with the same height as Baker, carries from 32 to 35 pounds more—he weighed 166 pounds on the day he established the world's record. Downs had about the height of Myers and the weight of Baker. Downer had about the weight of Long with a couple of inches less height. W. P. Phillips, a one-time champion quarter-miler of England, weighed 170 pounds and was 6ft. 1in. tall.



Maxwell W. Long.
World's Quarter-mile Record, 47 Seconds.

B. J. Wefers, who shares the 100-yard world's record of 9 4-5 seconds with John Owen, Jr., was about as tall and nearly as heavy as Long; Owen stood about 5ft.

7in. high and weighed not more than 132 pounds I should say on the day at Washington, just ten years ago the 11th of this month (October), when he won the 100-yards Amateur Athletic Union championship over Luther Carey and Fred Westing, and attained the distinction of being the first amateur to create the world's record figures of :9 4-5. Carey, who was one of the fastest sprinters America has produced, but never was given credit for being so good as he was, stood about 5 ft. 8in. and weighed about 138.

Thus it is apparent that no distinguishing type of physique is to be found among the famous sprinters whose work has substantially compiled the amateur record tables of the world.

Declining Professional Sport. There is no spectacle of to-day more truly indicative of the uplifting influence of the amateur sporting spirit than is afforded by the tremendously diminished

having degenerated into unsportsmanlike exhibitions that have driven away its former patrons. In a word, the people have become educated to an approximate appreciation of sport for sport's sake, and become disgusted with the dishonest contests and haggling of the professionals.

This is a pity—a pity that professional sport should have so degenerated—for it has its excellent uses. Yet, who that has witnessed the rowdy baseball and the corrupt manipulation of the teams of the American professional league, could doubt that the end must come. But the shame is none the less, that so good a game should be dragged into the mire.

In every other professional game the same end looms in the immediate perspective. Perhaps the most striking illustration is provided by the complete decadence of English professional sculling—once so popular. A few weeks ago the Professional Championship of England was contested by only two men—both of Australian birth! Absolutely no public interest was excited; the event fell flat where once it stirred the sporting blood. A melancholy contrast is this as compared with the days of a dozen years ago when both professional rowing and baseball attracted the sportsmen on both sides.

And all because the professionals could not play honest ball or row a straight race. Corruption has laid hold of the men and their games—and, with the unvarying result, killed all interest in them.

What a lesson to amateur sport!—what an argument against tolerating the slightest deviation from that broad fundamental of sport for sport's sake.

Men's Sana in corpore Sano. That was a very interesting experiment made in Chicago the other day among the school children, for the purpose of determining the trustworthy relationship between a sound mind and a sound body. The results ought to be convincing to narrow-minded parents of the inestimable value of athletics. So that the statistics might be comprehensive and dependable, 7,000 pupils were examined. Taking children of the same age "the results showed that small children on the average are not so bright as the average among children physically larger," and the examinations were held in schools where the "largest proportion of pupils had American-born parents."



John Flanagan,
World's Record, 16lb. Hammer, 169 ft., 4 ins.

interest in professional sport. This is not because of its being the sport of professionals; but because of professional sport

Right along the same line of inquiry—though among “children of larger growth”—exhaustive investigation in the regular army has demonstrated conclusively that the best soldiers, *i e.*, the most amenable to discipline, the best looking, the most healthful and the most enduring—are those companies or regiments in which there has been regular calisthenic drill and which have been stationed at posts where the enlisted men were encouraged to indulge in sport.

The result of all this investigation is official recognition of physical exercise in one of the most significant General Orders that has been issued from Washington in a long time.

Lieutenant-General Miles has always favored the introduction of athletics among the soldiers—but in this instance his preference becomes an order.

“All sports, amusements and recreations that tend to preserve the health and assure the contentment of the troops, as well as to improve their physical excellence and mental attainments, will be encouraged.”

Those who saw the regulars at Santiago will long remember them for their fine physical appearance as for their unwavering fighting qualities.

**Bob-
White's
Northern
March.**

One of the features of the autumn game-bird season has been the repeated evidences of continuous spreading northward of the range of the partridge (“quail”). This, however, applies only to the Middle West—for there has been no indication of a more northerly movement of this splendid bird in the East. But from Minnesota and from Michigan and Wisconsin come reports of bob-white in sections where, until comparatively recent years, his numbers, when occurring at all, were few and scattering. Nor is there suggestion of his more southerly ranges being vacated. On the contrary, he appears this year to be more populous than usual; which is certainly a sign that game protection is beginning to show some results, at least in the case of this hardy little chap.

If reports from the Middle West are trustworthy, there appears some cause for rejoicing, too, over the “prairie chicken” situation. Not that its condition is healthful, but that it has become no less so than last year. There seems to be occasion now for hope that the shattered numbers of

this bird will not be further lessened. Yet it is a very faint hope, for the continued unlawful summer shooting is making it very hard indeed for the remaining “prairie chicken” to hold their own. Early shooting in all the Middle West is prevalent—shamefully general in Iowa—and the fact is a disgrace to the sportsmen of that great section.

Speaking for the country generally, grouse and partridge appear to have been sufficiently plentiful; the 1900 season for both rod and gun has been eminently satisfactory.

The outlook for deer, caribou and moose is promising.

**The
Almighty
Dollar
in
Amateur
Sport.**

There appears to be a growing idea among certain types of wealthy men, who embark in one or another kind of sport—that they are a law unto themselves when it comes to a matter of ethics. A notion is developing, I observe, that, being wealthy, a man may accept cash prizes with impunity, since the plentitude of his worldly goods puts him above the suspicion of being attracted to the competition by the chance of money winning which it offers. But this is one of those convenient fallacies which are put forth to soothe conscience and hoodwink the public.

The most pronounced mug-hunters I have ever known were men of wealth; of the pot-hunters, who in the present day infest sport, a majority are long in pocket, if short in amateur spirit. There is only one amateur standard—and it stands for the sportsman, whether he keeps a stud, or a single hack.

I am moved to this comment by Mr. Albert Bostwick's recent insistence at Trenton that he be given a cash prize for his winning automobile, instead of the trophy which the Committee had provided. It would have been more sportsmanly and better mannered, if the trophies were not to his liking, for Mr. Bostwick to have raced for the sport of it, rather than to have demanded the cash value of prizes he had the good fortune to win. His action flatly contradicts any supposition that the money to be won was not an object of attraction.

From an ethical view-point, Mr. Bostwick must be classed as a professional, along with his *chauffeur*, for while some

like to weave an ethical difference between the two; in point of literal fact in a sporting sense, there is no ethical difference between a man paid to race and one who races for money. It's the jingle of the shingle which marks the professional—not his trade.

There is in Eastern yachting this same spirit, which I will take up later.

Speaking of automobiles—it is too bad their owners do not exhibit more consideration for the drivers of horses whom they meet on the suburban roads. I have had some personal experience in this direction, and know whereof I speak. Too often the horseless carriage clanks past without its owner making any attempt to slow down, or even showing any concern for your horse, which perhaps may be frightened to the point of running away.

**Better
Athletic
Conditions
on the
Pacific
Coast.**

The financial straits which beset the Olympic Athletic Club of San Francisco, a few years ago, and resulted in the turning out of the club's old management, and the election of entirely new officials—was the salvation of the club and a blessing to Pacific Coast athletics. For the new officials, headed by Mr. William Greer Har-

one on the Coast (and incidentally the oldest one in this country), its reformation has, of course, had a most salutary effect on California club athletics generally.

Having been an uncompromising critic of the Olympic Club during its old days of iniquity, it gives me added pleasure now to offer sincerest congratulations on its reformation.

True the O. A. C.'s chief athletic diversion seems, as of old, to be boxing, but there is no longer deception attempted in the character of the contests, which are amateur, in so far as it is possible to maintain such ethical status among the classes whence boxers are secured.

Track athletics have made slight advance on the Coast. As has always been the case, the Academic and the Grammar School Leagues are bubbling over with real and healthful amateur spirit. Unfortunately this spirit in the past has been chilled when the students left the Grammar Schools and the Academies. But it looks now as if new light had descended upon club athletics.

A similar improvement is noticeable in football. It is more than likely that all games in which one of the University teams (California or Stanford) take part will be held on University grounds, instead of in a public park in San Francisco. This is a very wise change, and one calculated to have a healthful influence on the sport. Hitherto these games have been the source of scandal, owing to the efforts of the Olympic and Reliance and other clubs to so strengthen their teams as to be considered "good" practice for the Universities, and thus be assured a game and a share of the San Francisco gate money.

The faculty influence from both California and Stanford is responsible for this praiseworthy change.

Around San Francisco rowing stands alone in showing no upward tendency. Its ranks are still filled with a squabbling, semi-professional, Sunday racing crowd; although I hasten to add that it also includes oarsmen who are amateur at heart, despite their associations. California row-



Mr. Albert C. Bostwick's
Racing Automobile

ison, are a very different class from the old ones, and have cleansed the club of its former professional habits. And since the Olympic A. C. is the most important

ing needs a strong governing Association with an Executive Committee of amateur spirit and undaunted courage.

Firmer Faculty Needed in California. The change from public to University grounds for the California - Stanford football game, and the proposed restriction to alumni coaching, come none too soon—since there has been unpleasant evidence this year that evil associations are near to corrupting good manners. An effort to enroll students of well-known athletic ability has been patent; at Stanford we observe Slaker, last year's Chicago half-back, and Seeley, guard of the '99 Williams eleven. Now while no charge of semi-professional may be tenable—the recruiting tendency so vigorously displayed this year is one the Stanford faculty must stamp out at once or abide by the consequences—which are in these days disgrace before the University world. Both Stanford and California made an over-zealous and undignified effort to enroll a Mendocino county school-boy athlete who gives promise of broad jumping 23 feet; and, in fact, the season has been rather retrogressive in point of ethics. I advise the faculty athletic committees of these two institutions to get together instantler.

The inauguration last year of football games between California and Stanford Universities on one hand, and the Universities of Nevada, Oregon and Washington on the other, proved a very satisfactory substitution for the practice games formerly played with the teams of the Olympic and Reliance Clubs. Oregon and Nevada both made very creditable showings, and the increased attendance fully warranted a continuance of the series on college grounds. California football needed this stimulus. It is a curious fact, by the way, that in the games between Stanford and California during the last four years, the victor has won by overwhelming odds—for example—the winning scores of Stanford in '96 and '97 were 20-0 and 28-0; California was victorious in '98 and '99, scoring 22-0 and 30-0. I recall no similar record in dual University football meetings.

Unless I am much mistaken, both California and Stanford will shorten their football season before another year; its present duration of three months is too long by a full month, and men cannot be

kept in the best of condition. As the season ends Thanksgiving Day, it should not open before October 1st, instead of September 1st, as it now does.

A Record Intercollegiate Championship Lawn Tennis Tournament. I do not remember an Intercollegiate lawn-tennis championship tournament to have been less brilliant or attracted less attention than that of 1900 played on the Merion Cricket Club courts at Haverford (Penn.). For various reasons the best of the University talent was absent, and play as a consequence was not above what may be called thoroughly good class tennis. Princeton won both single and double honors with Messrs. R. D. Little and F. B. Alexander—a very promising couple, by the way. Little beat W. J. Clothier (Swarthmore), 6-3, 6-3, 6-2, and the Princeton pair defeated the Harvard pair, Thomas and Ware—6-1, 6-2, 6-1.

Incompetent Judges in the Horse Show Ring. The experience of Mr. Howard Willets with the official judges at the White Plains Horse Show is a more or less flagrant instance of what is continually happening at the horse shows on the Atlantic Coast—where practically one set of men appear to do most of the judging. Mr. Willets' experience was, in brief—an entry disqualified as wind-broken in one class, and the same horse on the same afternoon given a second prize ribbon in another class! The judges were Messrs. Rives, Williams and Crozer.

Were this an exceptional instance, it might be passed over, but there has been such a lot of this kind of work in the judging rings in New York and its immediate vicinity, that we are bound to look into it; especially the ring of the National Association itself in Madison Square Garden which has supplied its quota of unpleasant examples.

The time has passed for dealing gently with this sort of thing; such judging is the result of either ignorance or dishonesty, and either count disqualifies a man for the judging ring. These are, I know, harsh words, but they precisely describe the repeated exhibitions of astounding judging to which we have been treated hereabout for several years.

Moreover, I have enough personal knowledge of several horsemen who serve

in the judging ring—and of one in particular very frequently seen—to furnish abundant good reason for doubting the honesty of their judgment. The National Association, I must add, falls a long way short of fulfilling its duty towards American horsemen; it ought to take official notice of questionable judging; it ought to be the native horseman's tribunal—but, as a matter of fact, it is little else than an impresario.

The judges chosen for the Madison Square Garden Show this year, on the whole, make a more acceptable list than has been presented of recent years; at the same time, the appointment of Mr. R. F. Carman as sole arbiter of the French Coaches and Pony Classes offends the sportsman's sense of propriety. A man who has been sent out of the show ring for a detected attempt to practice fraud upon the judges (through driving a recently-purchased horse in a class where ownership at time of entry was prescribed), is not the one to officiate as judge of a National show.

This calls to mind that the National Association is very lax in its supervision especially of four-in-hand classes, where coupled entries and borrowed equipments often discredit the actual conditions of the class.

**Golfing
Records
Galore.** The past month appears to have been one of golfing records, in which the younger element has taken a rather conspicuous part—although it really seems that some of the members of the so-called “younger element” have become “aged,” and should be otherwise classified. Mr. John Reid, Jr., for example, though quite a young man, is yet a golfer of too long standing to be longer classed with the youngsters, and the same is true of Mr. Walter B. Smith. I fancy we must draw the younger element line at graduation.

But to whatever class they belong, at least both these players have shown some very fine golf in the early autumn days. Mr. Reid not only defeated Mr. A. De Witt Cochrane for the St. Andrews Cup, but established a new record, 81, for the links. Both accomplishments of much merit, for Mr. Cochrane is one of the keenest match players in the country, and had, for this course, equaled the old record of 82 made in '98 by Mr. Reid.

In the West, Mr. Smith has established

a series of amateur records on the Onwentsia (Chicago) course, making 37 for nine, 79 for eighteen and 161 for thirty-six holes, and Messrs. Holabird, Jr., W. Waller and G. Thompson have earned title to heading the Middle Western first class. Mr. Walter Egan has not developed so rapidly.

Of Eastern tournaments, that at Westbrook undoubtedly provided the most interesting play, for three of the most skilled were entered for the President's Cup—Messrs. Louis Livingston, Jr., R. C. Watson, Jr., and C. Hitchcock, Jr. The victory of Mr. Livingston over both the others was something of a surprise, though merited by his strong game.

The New Jersey State Golf Association has set an excellent example in holding a State championship, and this seems one of the first steps toward the solution long sought for keeping the National tournament entries down to men really entitled to send in their names; with State championships followed by sectional tournaments—the way of the U. S. G. A. Committee would be smoothed, and the standard of American golf advanced. Mr. Howard A. Colby's work in the New Jersey tournament, while not up to his best, was yet commendable.

The Open Championship at Chicago attracted very few amateurs, and the event seems not to appeal to American as it does to British golfers; which I consider not at all strange or undesirable. Mr. Charles B. Macdonald, with a score of 355, carried off the U. S. G. A. Cup offered for the best amateur figures.

Vardon's defeat of Taylor, though by only two strokes (313 to 315), was none the less merited, though clearly the British champion has at no time shown the form in America which he exhibited on the other side when he defeated Vardon 309 to 317. We must feel that the question of supremacy has not yet been decisively settled between these two marvelously expert professionals.

**The
Deficient
Side of
Football
Legislation.** A long way the best of the new football rules is that which clears the side lines of all save five (which are too many, for none is really needed), and thus lessens the opportunity for illegal coaching, which of recent years has been a growing offense that was sure to result in scandal.

It came very near doing so last year, and only that one side was nearly as deep in the muck as the other was in the mire, kept the peace. Detected coaching from side lines will hereafter cost the offending team ten yards. Another good change is that which provides for the loss of ten yards rather than loss of the ball, as formerly, to the team guilty of off-side play. The re-arrangement of the rule concerning retreating twenty yards in order to retain possession of the ball—is not of great importance to the general football world—for it would not be employed more than once in an athletic generation. However, as now provided, possession of the ball by the other team must follow every play of this character before it can be repeated.

The Rules Committee could have done the game great service by extending one of its rules to cover and forbid the face smashing of a running back, as he crests the opposing line, by an opposing back delegated for the purpose. I have in mind McBride's fist meeting Ellis full in the face every time he crested the Yale line last autumn at Cambridge.

The umpire on that occasion neglected his duty by not ruling on it then and there. Certainly it is a clear violation of the spirit, and, I believe, also of the letter of the rules; moreover, it's a game two can play at, and if not corrected some disgraceful scenes are sure to result, for we can hardly expect the football player to always obligingly turn the other cheek that his opponent may the more advantageously smite him.

Take warning, Messrs. Umpires, Captains and Coaches of Harvard and Yale.

The new football rules are all very well, but it is one thing to make rules and another to carry them out; and the latter appears to have been the seriously deficient side of football legislation.

However much the friends of wholesome college sport may differ from Pennsylvania's advisers on the subject of preliminary football practice, at least the Faculty Athletic Committee of that University must be credited with being perfectly frank in its advocacy. Such reductions in the period of preliminary work as Pennsylvania has made are due rather to re-

spect of general university progress in that direction and a desire to be in harmony with it, rather than because of any change in the convictions of the U. of P. faculty.

I make a point of emphasizing Pennsylvania's attitude on this important question—because last month I unwittingly did her Faculty Athletic Committee the injustice of believing a majority in favor of abandoning preliminary practice, and of criticizing and classing them with Columbia, for their failure to stand by their convictions this season.

See football department for dates.

**Close
Football
Games
Promised.**

The football season, even so early as this writing, indicates that the final big games will be unusually close. Yale has a score to settle with Princeton. Pennsylvania one with Harvard, Annapolis one with West Point, and every one of them is well qualified to undertake the task, for all are stronger than last year.

Yale has experienced material, and at the present a line so heavy as to be sluggish; but slow forwards are not habitual at New Haven and not likely in 1900 with so stirring a captain as Gordon Brown. Therefore Yale ought to have a powerful team which will stand more than even chance of beating Princeton, and an even one with Harvard.

Pennsylvania is ten per cent. stronger than last year (notwithstanding her candidates had no more preliminary practice than in '99), and will play a desperate game against Harvard. But Harvard will be fit to meet the most determined onslaught of both Pennsylvania and Yale. Her early showing was perhaps less impressive than that of some of the others, simply because of an embarrassment of riches. From now, however, unless I mistake indications, Harvard will develop into a fast and very strong eleven. Pennsylvania will make the issue doubtful—but the chances seem to favor Harvard a little; as for the Harvard-Yale game—it will be a battle of giants, and no opinion of the likely result is possible at this time.

Princeton is going to have a great combination back of the line—but the newer line will place her at a disadvantage against Yale. But Princeton always develops slowly—quite the best way.

FOOTBALL

THE UNIVERSITY OUTLOOK.

THIS is certainly a record-breaking year for newspaper misrepresentation of football men in the colleges. Wild stories of athletes having been decoyed from one college to another, with a lot of harrowing details which, upon investigation, prove to be without foundation, have appeared in the press with disgusting persistency.

A conservative estimate of the prospects of a given university team is garbled or elaborated in the metropolitan editorial rooms until its sender at the university can hardly recognize it.

The first suggestion to the college alumnus is that he pass lightly upon the average press reports, especially if they be of the character of the "Daly" (of Worcester) despatches. The general tone of college football has not been so high in years, nor has the average student standing of the athletes been so satisfactory.

AT this writing (October 14th) the leading teams are in an even more unsettled condition than usual, the squads having suffered no reductions whatever. This is due to the unusual supply of raw material. The classes of 1900 were remarkable for athletes at most of the colleges, and their graduation leaves vacancies more serious than usual in all the prominent teams, save Yale's. This great need, the entering classes as a rule seem able to meet, but it will require much care to select the "finest of the wheat" without serious mistakes, and then get it ready in time for November's big games.

Few teams began practicing before the opening of college, the most conspicuous having been Columbia, whose men began working at Branford, Conn., three weeks before the opening exercises at the university. Pennsylvania started some local men informally about September 5th, and dated her formal preliminary season from September 12th, the university opening its several departments on different dates during the last week of the month. Yale and Harvard men began work on the 17th, their universities opening on the 27th. Princeton began on the 17th, and the university opened on the 19th.

HARVARD has the customary wealth of material, each of three upper classes (1901, 1902 and 1903) having had powerful freshman teams. It will not be unreasonable to ask of Mr. Diblee another eleven representative of Harvard's newly-found athletic prowess. The games played thus far have been:

Sept. 20th—Wesleyan, 24—0, 15 and 10-m. halves.
Oct. 3d—Williams, 12—0, 12 and 12-m. halves.
Oct. 6th—Bowdoin, 12—0, 15 and 10-m. halves.
Oct. 10th—Amherst, 18—0, 15 and 10-m. halves.

Oct. 13th—Columbia, 24—0, 20-m. halves.

The ends will doubtless be Campbell and Hallowell, although the latter's serious sprain of his ankle may affect his usefulness. Farley, substitute on the 1898 eleven, will act in the same capacity this year, if, indeed, he does not win a regular place. For tackles, James Lawrence and Graydon seem to hold the call. Graydon weighs 178 pounds, is quick and strong, and runs well with the ball. Grew, Blagden and Knowlton are also on trial. Boal is available for guard, but does not want to play. He is likely to be out, though, in time for the Harvard-Penn game on November 3d, as he is almost certain to be needed. At present Lee and Barnard are playing the guards. They are fair men and capable of further development, but they are not equal to Boal. Sargent, for two years understudy to Burnett, is filling center, Sugden being the only man to push him hard. Capt. Daly will, of course, play quarter, with excellent substitutes in Sherlock (formerly of Brown), Rex Fincke and Baldwin. Daly has so raised the standard of quarter-back play at Harvard that any one of these men would be good enough for an ordinary eleven.

Ellis, the demon plunger of 1899, E. Kendall, Gierasch, Sawin, Hersey and Derby make a bunch of half-backs far surpassing Yale's and Penn's material, and only equaled by Princeton's. From these, with Kernan and Stillman for the punting (both of the latter renewing their friendly rivalry of the baseball field last spring), Harvard should have a back-field fully up to 1898's strong trio.

As to her chances in November, it would seem as though both the Penn and the Yale games will be harder for her than they were in 1899, especially if McCracken plays again. He has already represented his university in four different academic years in track athletics, and if he plays football this fall will be representing her in a fifth year. This is certainly contrary to the eligibility rules to which both Penn and Harvard have subscribed, the sixth rule reading: "No student shall represent one or more universities or colleges in athletic contests for more than four years."

PENNSYLVANIA's outlook is far better than it was at this time last year. Her men are in far better physical condition, and they are therefore in position to acquire the details of the Woodruff system and to perfect that absolute concert of action necessary to its effective execution. This superior condition they claim as due to the preliminary practice.

Her games to date have been:

Sept. 29th—Lehigh, 27—6, 20 and 15-m. halves.

Oct. 3d—Franklin and Marshall, 47—0, 20-m. hlv.
 Oct. 6th—Haverford, 38—0, 20 and 15-m. halves.
 Oct. 10th—Dickinson, 35—0, 20-m. halves.
 Oct. 13th—Brown, 12—0, 20-m. halves.

It will be observed that the playing time in Penn's early games has been longer than those of Harvard, Princeton and Yale.

Of last year's line, Wallace, tackle, and Hare and Teas, guards, three of its four most important members, remain, the missing men being Overfield, center, Snover, tackle, and Outland, end. For the ends, W. Gardiner and Davidson seem the strongest men, and Zimmerman is making a hard fight for the vacancy at tackle. McCloskey, who, as substitute for two years, has played in many games, has the lead for center, and a decided heavyweight named Horner, with capacity for storing many "Christmas pies," is pushing him hard. Graves is after Woodley's place at quarter, and, as he is snapper and surer, may get it away from him. For halves, John Gardiner and Porter lead, but Gillmore, a Yale '99 man who sat on the side lines and saw less efficient men play against Princeton in 1898, is doing splendid work. McCracken is, of course, by far the most powerful ground gainer at full-back, but he cannot do the punting. That is likely to fall to Graves' lot, who ever may play in the back field.

If McCracken plays for Penn, she stands an even chance of beating Harvard; if, however, he should be debarred, the outlook rather favors the crimson.

PRICETON played her first game later than the other big teams. Her record thus far is:

October 3d—Stevens, 40—0 15 and 10-m. halves.
 October 6th—Lehigh, 12—5, 15 and 10-m. halves.
 October 10th—State, 26—0, 20 and 15-m. halves.
 October 13th—Annapolis, 5—0, 20 and 15-m. halves.

The abundance of material is remarkable, the entering class surpassing all previous records. At the same time there is a mountain of work to be done, and possibly we may see still further scoring by smaller college teams before a representative Princeton eleven is evolved. The ends and tackles will be strong, with Roper, Davis and Little for the former, and Pell, McCord and perhaps Davis for the latter. The troublesome task at Old Nassau will be the making of a strong center trio. At present the candidates are all below par. For center Butkiewicz, an Andover freshman, seems most likely. He is fast, strong and a diligent worker. For guards, Mills, Dana and Fisher show the best qualities. The back field should be equal to the best. Duncan or Meier, after the latter learns the place, will make excellent quarter-backs if Hutchinson does not come out.

The halves will be selected from Reiter, McClave, Hodgman and Henry, all superior men;

and either Mattis or Underhill will be fullback. Mattis is a very long punter and a fine plunger. Underhill runs well, does not punt so far as Mattis, but is an excellent drop kicker.

The spirit of the men is admirable, and they show a determined disposition to learn the game and help each other in every play. The eleven will be what is called a "green team," but it will be one of those fast, snappy combinations that will take a lot of beating.

YALE field is the scene of a daily exhibition of desperate earnestness which would make both Princeton and Harvard men thoughtful could they but see it. Mr. McBride and Capt. Brown are out for blood, and their spirit has so enthused the whole squad that it will be a tough proposition, indeed, to put Yale under for the third time. Her early games have resulted as follows:

September 29th—Trinity, 22—0, 15-m. halves.
 October 3d—Amherst, 27—0, 15 and 10-m. halves.
 October 6th—Tufts, 30—0, 15 and 10-minute halves.
 October 10th—Bates, 50—0, 20 and 15-minute halves.
 October 13th—Dartmouth, 17—0, 20-m. halves.

Yale's losses through graduation have been slighter than those of the other big teams, and her new material seems excellent. The ends are still below the Hinkey standard and are not likely to reach it this year. They will probably be Gould and Coy, with Rafferty, a freshman, as a possibility. Stillman will play right tackle for the third season, and at left tackle there will be found Kunzig, Bloomer, a freshman, or possibly Hale. Capt. Brown and Hamlin or Olcott will be the guards. Hale weighed but 169 pounds when he played center last year, and now he is trying for fullback. He is a line breaker of no mean power, and also punts fairly well, but perhaps Yale is spoiling a crack line player to make only a good full-back. Olcott, 220 pounds, is now at center, but Holt seems to handle himself more like a center rush. Fincke and Wear are still fighting for quarter, with the chances slightly favoring Wear. Sharpe, of drop-kicking fame, has a clear lead for one half, with Chadwick, Keane and Cook hard after the other.

As the Yale policy seems to favor weight this year, Cook has that point to his credit, and his general work is excellent. Chadwick has improved greatly over last year. Hyde, a former Wesleyan player, is being worked hard for full-back.

Yale plays Princeton on November 17th at Princeton, two points in favor of the Tigers. She is always harder to beat after she has played Harvard. Still, by reason of veteran material, Yales' chances of winning her big games are brighter than in '99. "There's many a slip," however, and with so many factors en-

tering into the situation, he would be rash indeed who would definitely forecast the outcome of these great games a month or more in advance.

COLUMBIA'S new line is built around Wright, guard, and Smythe, tackle, all the other '99 forwards being gone. Slocovitch remains, however, and has finally consented to try for end once more. The best of the new men is Murphy, who enters the Law School from Branford, where the team passed its preliminary season. He is a husky, energetic center rush, quick to learn from Sanford the features of play which made him so formidable a center himself. Sykes, a former Maine player, is the best quarter Columbia has had except Wilson.

Ashley, a Western man, is a strong end, but a better drop kicker, while Weekes and Morley, last year's brace of backs, are doing as good service as ever. Columbia needs a punter, better ends and much stricter attention to the fundamentals of the game.

CORNELL men expect their team to equal last year's eleven, but the reason for their optimism is hardly apparent now. With Caldwell, Pierson, Folger and George Young gone, the task is not at all an easy one. Capt. Starbuck's bad shoulder has retarded the development of the team somewhat, as has also the experimenting with center men. Finucane and Brewster are fighting it out for quarter-back, and the halves will probably be Morrison and Otis. Taussig and Alexander are doing their usual fine work at end and tackle, and Warner is a better guard even than he was in 1899. The eleven is enjoying the able coaching of Mr. Percy Haughton. Its 16-0 defeat of Washington and Jefferson, October 13th, was fair work.

Lehigh has started well by scoring on Penn. and Princeton. Both touchdowns were due to the alertness of her ends, Dornin and Capt. Gearhart, in taking advantage of two fumbles by substitutes, but they reflected great credit on Lehigh, nevertheless.

The team is a green one, no fewer than eight freshmen being members of the final squad. The ends are excellent; Fairbaugh, a freshman half-back, is a capital ground gainer, and McCormick, also a freshman, punts strongly. The line is stiffer than usual, but the men still have much to learn. Fortunately, they have an excellent coach in Mr. Okeson and a consistent home coaching system, so that good work may be expected of Lehigh's 1900 eleven.

ANNAPOLIS is early giving evidence of benefits derived from the defeats of last season. The work of the eleven is more thorough and has

also the usual Navy snap. Holding Princeton to a single touchdown on the 13th was praiseworthy work.

West Point's team is in better shape than at this time last year, though that is not necessarily to its ultimate advantage. Yet it has been showing promising form.

AMONG the smaller New England colleges, Williams, Wesleyan, Brown and Dartmouth are usually grouped for consideration.

The problem at each place is substantially the same, although the inroads which graduation made on the Williams and Dartmouth lines were rather more severe than those at Brown and Wesleyan. The adoption of the graduate coaching system at all four of these colleges is heartily to be commended, Williams and Dartmouth having fallen into line.

Williams has two excellent tackles in Capt. Simmons and Hatch, and admirable ends in Cullinan and O'Neill. These men are experienced and powerful, fully holding their own with their Harvard opponents in the Cambridge game on October 6th. To fill the center places, Cole, Davenport and Higgins, a freshman, have all been tried as guards, and Kanter and Waller as centers. They are strong, active, heavy men, who outplayed their Columbia opponents on the 10th. Moore, the sterling quarter-back of 1899, left a place which neither Leggett, Vose nor Gutterson can fill. The half-backs are Graves, Lawrence, Jaeckel and Wilbur, and the full-backs Dolph and Peabody. Graves is the best, being the speediest, headiest and strongest on defense. Dolph's punting is better than last year's, and he also drop-kicks well. The team also looks able to beat Wesleyan for the triangular championship.

WESLEYAN lost Brown, guard, and Hartzell and Wing, half-backs, and it is probable that Lufkin, guard, and Cornwall, end, will not play this autumn. This has necessitated, therefore, the shifting of Silliman from center to guard, and Montgomery from tackle to center. Capt. Solon Dodds, heavier than ever, is playing a splendid game at end, and Garrison, a goodly freshman, is in Cornwall's place. Miller, another freshman of really unusual caliber, can substitute either at end or quarter.

Inglis, full-back, is Wesleyan's star athlete. He is a terrific line-breaker, a good punter, strong on defense and the team's inspiration. Of the backs, Lacey and Calder are the best, and if they were as strong in tackling and backing up the line as they are in running with the ball, all would be well in Middletown.

Dartmouth's team will be lighter in weight than previous Green Mountain elevens have

been. It will also be quite new, as Capt. Lowe, guard, Aling, tackle, O'Connor, the end, and Proctor, full-back, are all that remain. The new material is not yet sufficiently tried out to enable one to estimate on the team's chances, but it's hard work to score twice on Exeter and the tie game with Union indicate unaccustomed weakness.

Brown always rallies well, however great her losses. Capt. Washburn's work at half-back, coupled with that of Barry, and the full-back, Bates, is helping to atone in a measure for the loss of Richardson. Scudder, last year's crack end, is on hand, while Cann and Bartlett, who substituted last year, are trying for the other end. These, with Sheehan, tackle, Whittemore and Melendy, the stalwart and really high-grade guards, are able to stiffen up any line. Of the new men, Keene, a freshman, is already outdoing the record of his predecessor Hopgood, and promises to be one of the best tackles Brown ever had, and Hall, another freshman, is doing unexpectedly well at center. Brown, for some reason, does not play Wesleyan, but she will meet Dartmouth November 17th.

AMHERST, it is a pleasure to note, finds much to encourage her in the friendly attitude of Prof. Harris toward athletic sports, the adoption of a permanent system of play and the material contributed by the freshman class. They have had a hard row to hoe at Amherst, and their most aggressive rivals would not begrudge them a larger share of athletic success. Of last year's team, Capt. Ballentine, end, Swift, quarter, Park, guard, Morse, tackle, Washburn and Wiggins, halves, remain; also several substitutes. Excepting the first two, these men will have to fight hard for their places. Of the new men, Shay, a freshman, seems the best and will doubtless hold one end. He is very fast on kicks and a fine tackler.

Amherst's improvement may not be marked this year, but the abundance of material and adherence to a definite home policy of coaching under the direction of Mr. Lewis, ex-captain at Amherst, and subsequently the Harvard center, cannot fail to produce a higher standard of play and a larger proportion of victories.

MICHIGAN foolishly has discarded its system of graduate coaching but is being ably coached by Langdon Lea, one of the best tackles Princeton ever had. Having plenty of raw material at the beginning of the season, he has developed a team that bids fair to outrival any the University has yet had.

Chicago, under the direction of A. A. Stagg (Yale), has had a most difficult task, owing to having lost through graduation its quartet of

backs, the greatest combination yet gotten together on a Western team, and I doubt if they ever had an equal, taken collectively, on any college team in the country, barring, perhaps, those playing on Pennsylvania in 1894. Chicago's style of play has been somewhat changed to meet the altered conditions.

Wisconsin, again coached by Phil King (Princeton), has grown wiser, for instead of building a team around their great kicker, O'Dea, as they did last year, they have this year developed a well-balanced eleven around a fair kicker and a good line buckler, relying not alone on their backs to carry the ball, but using also to good advantage the line men. The result, while discouraging at first, is one of the strongest elevens Wisconsin has yet had. It has been clearly shown that a team relying on one man or one style of play is not the team that secures the greatest number of victories.

ILLINOIS, like Michigan, has also unwisely abandoned graduate coaching, and Smith and Holt, of Princeton, have—from a very dark outlook—gotten together a team which, while not so strong as others representing the University, has yet a deal of promise. This is chiefly because a large percentage of the candidates are in the first or second year of their college course, which means a nucleus sure to be valuable in results and likely to raise the Illinois standard of football. It is too bad they could not have stuck to graduate coaching and made the foundation more substantial.

UNIVERSITY OF IOWA, under the coaching of Dr. Knipe (Pennsylvania), seems to maintain the excellent standard set last year. Their geographical position is a handicap in securing good practice games, and their game with Chicago is the only real test of the season. It will, therefore, be the more interesting, especially as they played Chicago to a tie last year.

University of Minnesota has engaged Dr. H. L. Williams (Yale), as director of athletics, an excellent step, for a more competent man could not have been chosen. A good foundation is being built for systematic and wholesome endeavor—which is certain to return satisfying results. Its tie game, 6—6, with Chicago, October 13th, is the beginning.

NORTHWESTERN had an unfortunate season last year, and not a very hopeful beginning this season, but seems to be looking up.

Purdue has maintained its graduate coaching staff, and with the assistance of a good kicker is making a very creditable showing.

OTHER SCORES: October 13th—West Point 28, Trinity, 0; Lafayette 34, Swathmore 0; Carlisle 16, Virginia 2; Michigan 24, Case, 6; Wisconsin 11, Beloit 0; Northwestern 12, Indiana 0.

LAX GAME PROTECTION IN THE SOUTH

AS a matter of nature, there is no better small game country on the continent than the territory of the Southern States. They have a rare favorable climate, plenty of cover and plenty of game food. Only ordinary care is needed to preserve the game, and, to increase it, a slight addition of stringency to the laws and their enforcement. Thirty years ago there was no Southern State, from Virginia to the Gulf, in which excellent shooting and fishing were not to be had for the trouble of seeking them. Even in the most thickly settled portions, deer, wild turkey and quail were abundant in season. At present, if the sportsman wishes a full bag, he must, in general, seek those parts of the land which are timbered and in which the farms are sparse.

The upper classes of the whites respect the game law, but the lower classes do not, and the negroes pay no attention to it at all. The cheapening of firearms and explosives has resulted in bringing weapons and ammunition within the reach of the blacks, and, in and out of season, they are tireless pursuers. The negro who shoots upon the wing is rarely seen, yet the race as a whole is learned in the ways of bird and beast and is fatal to both. The white man of the South is good natured. It is not often that he will take the trouble to bring to justice the violator of the law. He will, indeed, watch complacently through season after season the illegal netting or trapping of quail, and never lift a finger, though the theft of a \$2 sheep from his fold makes him talk darkly of lynching. He has been used always to a plentiful provision of game, and it is the hardest matter in the world to bring him to look upon it as property.

So great has been the demolition of wild things within the past two decades that the end is plainly in sight. Unless Southern legislatures pass laws of stringency and make provision for their enforcement, the Southern States will come in time—and in a comparatively short time—to be no better shooting grounds than Connecticut or Massachusetts. In Georgia, Alabama, Mississippi, Louisiana, Florida, South Carolina, upper Arkansas and Eastern Texas the past ten years has seen a decrease in quail and deer of quite 50 per cent. In those commonwealths it used to be no trick at all to bag a dozen brace of quail in a morning, or to stop a deer on a three-mile drive. Now, taking a bag of birds means a day's hard, close work, and a deer hunt is much more often resultless than fruitful. The treatment of the game supply of the section has been marked by a splendid wastefulness. It is a repetition of the story to

be written of every other part of the United States. It seems that Americans will never learn to treasure the bountiful things with which Nature gifted their country.

THE crime of dynamiting fish is also common in the South, nor is there evidence anywhere of a determination to put it down. There is scarcely a bayou or creek in the far South that is free from it. The perpetrators are not, in general, negroes, because a negro knows nothing of dynamite, and cannot be brought ordinarily to use it. The native white are chargeable with this. Use of a violent explosive in a stream not only slays pounds of fish that are not recovered, but it drives uninjured fish to seek other grounds. It is an offense for which confinement at hard labor in a penitentiary would not be too severe punishment, but there is evident no disposition to treat the perpetrators as they deserve to be treated. In Louisiana and Arkansas are several streams once fecund of bass and white perch which have been ruined in this manner, and the men who ruined them are simply riding farther afield in the effort to find other streams.

There can be no question that any game law can be made to stick if it is backed by a few determined sportsmen. Three men, acting together, are enough to do the work in any community. Indeed, in most of these communities sportsmen merely wait for some one to take the initiative. They are ready enough to support any man with enough temerity to bell the cat. This was once demonstrated in Southwestern Texas, a wonderful country for quail. It was the habit of farmers and idlers to trap, or net, the birds and expose them for sale in open market, where they retailed alive at 40 cents a dozen. The men were violators of the law, of course, but no one seemed disposed to take action. One sportsman caused the arrest of three of the vendors. They were tried and promptly fined.

THEREAFTER the supply of quail in market did not decrease, but only dead birds were offered. Examined, they showed no shot-marks, and the sellers were once more fined. Then the hundreds of birds on sale all showed shot-marks. Examination proved that they had been first slain by having their skulls crushed and then needles, stuck through corks, had been jabbed into them to simulate wounds. Heavy fines being imposed, the traffic was broken up. The life of the man who carried through the crusade was threatened, he received warning letters through the mail, and all that sort of thing, but he made the netting and trapping industry a dead industry.

H. S. CANFIELD.

THE GUN

AUTUMN SHOOTING.

THE early part and sometimes the whole of November is the best of the year. Game, big and small, is now at its best, and there is a magic in the air and a beauty in the browning of the landscape which cannot fail to appeal to those who like a trifle of hard work with their pleasure. It is true that the gorgeousness of the full flare of the turning leaf is now toned down a bit, but the prevailing brown is the proper background for sporting scenes.

I am ready to admit that the grouse of the prairies—the “chicken” and its near relatives—are not the game they were a month or more ago—but what of that? They are harder game, that is all; and what sportsman wants easy game? There are still bright, windless days upon which big, strong grouse will lie fairly well, and I would sooner drop a husky, thunder-winged bird at long range than a dozen soft young things of the early season. A fellow won't get so many, and he will work hard and shoot his best for what he does get, and each successful shot will be something worthy of a place in that treasure-house, a sportsman's memory.

Quail are now swift and strong; even birds of extremely late broods are able to take good care of themselves, and the same is true of that regal fellow, the ruffed grouse.

The cover, too, is as good as one could wish; most of the leaves are down, and be the quarry quail, grouse, or that finest of birds, a belated cock, it is at its best, while the conditions give the gun all a good gun should ask—namely, a fair chance.

If the dog is not now in the pink of condition for a hard day he is either a duffer, or his owner doesn't know how to fit and handle a good dog. The best remedy is either a new dog or a new handler—more frequently the latter. The covers of New York, Pennsylvania, portions of New England—Maine especially, Quebec, New Brunswick, Ontario, Michigan, Wisconsin and Minnesota offer tempting inducements these late autumn days.

DOGS FOR RUFFED GROUSE.

THE best dog for ruffed grouse is a properly broken pointer or setter. One is as good as the other—the requisites being a fine nose, staunchness, and what is comprehensively termed “bird-sense.”

Color is an important matter. There should be a considerable amount of white in the coat, because it is conspicuous when the dog is mo-

tionless on a point—a decided advantage in typical grouse cover.

On account of the coat, I do not fancy those grand dogs, the Irish, Gordon or black setters. The Irishman, especially, is one of the best dogs that ever stood a bruising campaign. Handsome, intelligent, full of dash and courage, he is an ideal dog for the prairie or any open country, but alas! his mahogany coat, beautiful though it be in sunlight, is a serious drawback when matched with rotten logs, stumps and the like in heavy cover.

The same objection applies to the Gordon, the black setter, and, of course, to black, liver and nearly all-liver pointers. They all too closely match the innumerable patches of shadow in woods and the prevailing browns and blacks of fallen stuff. If the object were to conceal the dog the colors could not be better chosen, but what is wanted is a conspicuous coat—the more easily seen the better.

For the very same reason, a pure white dog, or one with inconspicuous markings, is a sorely handicapped helper in snowy woods. Hence, when choosing a pup, I prefer one with a coat which, roughly speaking, shows about half-and-half of white and whatever the dark marking may be.

Blood will tell, and only the best of sporting blood backed by the schooled intelligence of the typical pointer and setter, can successfully cope with the infinite variety of grouse shooting. Let the motto be, “No mongrel need apply.” Mongrel he ever so well he is sure, sooner or later, to make a mess of things, and in any event he lacks the beauty, grace and well-bred finish which marks the right dog and its work, and which to the true sportsman are more pleasing than the mere killing of game.

Well-broken spaniels occasionally do good work on grouse, but how often in this country do we see a well-broken spaniel at work in cover? In the marsh, is quite another matter. Spaniels will tree grouse, but who wants his grouse treed? The type of spaniel seen at bench shows is about as far from a useful sort for land work as could be invented. The Clumber is a nice, intelligent animal, but a Berkshire shoat could give him a close race at covering ground. The Clumber is all right on his native estate, but he won't do for this land of magnificent distances where speed, endurance and wide, free ranging are so frequently necessary. Such a heavy, stumpy-legged dog is all right for bolting rabbits, or hustling pheasants and cock out of cover, but he is too cumbersome and noisy in action for ruffed grouse.

In deep snow he is absolutely useless, as the best he can do is to wallow about—that is, when he isn't gnawing snowballs off his feet, or temporarily lost owing to his coat.

The Clumber's build is wrong, and so also is that of the other spaniels of bench-show type. All are clever and willing, but their fashionable figures are too great a handicap. Weight and lumber have no place in a grouse cover, and the few men who praise the work of clumsy, noisy dogs (I don't mean tongue), either are themselves too sluggish to follow fast dogs, or they are unfamiliar with the fine, well-regulated work of crack pointers and setters.

"But," some reader may say, "I own, or have seen, fast spaniels—leggy dogs that could get over ground and keep going—and they could find birds, too!" Very good. There are such dogs. I have seen hundreds of them. A few of these hundreds found birds, and kept on finding them—usually at a distance of about one hundred and fifty yards from the gun. If these dogs had possessed any sense and a couple of pairs of wings, they might have captured quite a few grouse and divided up with me. As it was, lacking the wings, all they caught consisted mainly of clubs, profanity and an occasional charge of shot. The remainder of the hundreds worked differently. They ranged far and when they had got reasonably close to a grouse they stopped and waited. They were good. A setter is only an improved, leggy spaniel.

WILD-FOWLING.

NOVEMBER'S chilly blasts bring the great flights of geese and ducks down from the far North, and with them royal sport. Let the novice at flight shooting, or over decoys, bear in mind two things—first, that all waterfowl fly much faster than they appear to, and, secondly, that in nine cases out of ten they are farther away than they seem to be. Therefore add at least ten yards to the apparent distance; hold well ahead, and keep the gun at an even swing until the shot has started upon its journey. Don't be in too great a hurry—keep hidden so long as the game is coming nearer, for it cannot well be too near. Don't be careless about dress—wild-fowling is cold work. Heavy woolen underwear and sweater, with heavy canvas, or corduroy, outside, will be the proper thing. Wear stout gloves while you can—numbed fingers spoil shooting. Take a big lunch and a small flask, the latter for emergency only.

BIG GAME.

MOOSE, elk, caribou, deer and bear. How at the mention of these the mind flits to the Adirondacks, Maine, New Brunswick, Newfound-

land, Quebec, Northern Ontario, Michigan, Minnesota, the farther West and the Great Backbone beyond!

MOOSE.

THE best country to-day for moose is Alaska. There prime specimens carry heads which amaze Eastern sportsmen. The Alaska ranges are, unfortunately, a bit too remote for the majority of sportsmen, and the same objection applies to the northerly portion of the Canadian territory just east of the Rocky Mountains, although it is good moose country.

In my opinion, the best moose range to be easily reached lies in the extreme eastern portion of the Province of Manitoba. Within a reasonable distance of the small stations of Rennie and Monmouth, a man can be nearly sure of getting one or more good bulls.

Another good country is reached from the little town of Mattawa, Ontario, situated at the junction of the Ottawa and Mattawa rivers.

The newly-opened Lake Temiscaming country is reached via Mattawa, and this is a first-rate big-game region which presents no unusual difficulties. Guides and camp supplies, if desired, may be arranged for at Mattawa.

The next-best hunting-ground, and a very good one, lies in New Brunswick. My latest advices are favorable, and a party going to Fredericton and there securing guide and supplies, should stand an excellent chance. Good guides may be hired at reasonable expense. They are trustworthy, cheerful workers, and the visitor may safely leave the selection of route and other details of the trip to them.

Lastly, there are the grand old woods of Maine, reasonably accessible, and this year, thanks to wise enforcement of the laws, very promising.

CARIBOU.

THE best caribou-hunting to be had to-day is in Newfoundland. This necessitates a sea voyage, but the regular steamers are comfortable, and the chance for sport is so sure that it may be considered a certainty.

There are a few caribou in Maine, but a much more promising territory lies to the north of Quebec City. The caribou drift to the southward ahead of the severe winter, and from a headquarters at Lake St. John, or one of the minor stations in the Lac Edouard or Kiskisink country, the visiting Nimrod stands a fair chance of success.

The north shore of Lake Superior offers many possibilities—in fact, it is a good caribou country, and the string of small stations along the railway is a convenient base of operation.

THE PROPER EQUIPMENT FOR WOODCOCK SHOOTING.

WOODCOCK and shore-birds are now lawful quarry. In sections where legislation is intelligent the season does not open before September 15th, which is early enough. The best costume is the lightest available tan-colored canvas for coat, trousers and hat or cap. I prefer canvas leggings and an old pair of laced boots. Waders of any description are too warm. If a man gets wet in his boots, it makes but very little difference, for even an out-and-out ducking would hardly harm anybody.

The gun for cock-shooting should be a light, hammerless twelve or fourteen gauge. A light charge of smokeless powder behind either three-fourths of an ounce or a full ounce of number ten shot will do the work, for the cock is a tender bird, and close shots are the rule. In this snappy shooting heavy charges are a positive nuisance, as one is apt to blow a bird to bits, while the jar from a necessarily loosely held

gun is not only apt to cause headache, but it is also bad for one's shooting and temper.

E. W. SANDYS.

THE PIGEON'S HOMING INSTINCT.

THE intelligence and instinct of the homing pigeon are extraordinary. Of this the following incident is an example:

On June 18th, 1899, eight homing pigeons were liberated at Reidsville, N. C., to fly 400 miles to a loft in Somerville, N. J. The weather was very stormy and continued so for several days. Two birds reached their destination the same day, and five several days later. One, a large, speedy-flying red hen, hatched in September, 1897, remained unaccounted for.

Fifteen months after, on September 1st, 1900, she made her reappearance at her home loft in a very tired condition. Bewildered by the storm, she probably went into some strange loft, where she was detained. When liberated, she at once returned to her own loft.

ANGLING

OUT-OF-SEASON PROBLEMS.

THE indoor angler, he who in the winter of his discontent ponders over the lures he will prepare for the coming season, will soon be busy with problems, and will probably throw in his allegiance with one or the other of the two great fly-making schools, just as with the product of this or that he has been personally successful in the past season.

My judgment may be biased by the similar results, but I think not. I am a constant angler in many waters, and a catholic one, too, who hears in many a riverside camp, or reads, the experiences of many brothers of the craft, and withal am by nature conservative.

The two main fly-making schools are the "formalists" and the "colorists."

The latter abide in the faith that color is supreme, and that a touch or tone of this or that, on hackle, wings or body, will kill a trout when no other tint, dyed or natural, will.

ON the other hand, the formalist believes that size and form, winged or palmer-dressed, are the most efficacious patterns, and the experience of many old trout-fishermen confirms the belief of the formalists.

When doctors disagree, who's to decide? I have passed years on the stream and have found only in rare instances that a certain color

was the only one which would lure a trout. The reverse I have generally found to be the fact, for a nondescript is often the most effective—the red-ibis, for instance, the like of which was never seen alive on stream or lake.

Good judgment as to when and where to fish; delicacy and accuracy in casting and the proper manipulation of the fly on the water, are the potent factors of a successful trout outing, and bring success, or account for its absence, whether the fly be the most approved product of either school of makers or anglers.

The little reliance that is placed on the color theory, and of a large assortment of patterns, was brought home to me most forcibly on a recent angling tour from New York to the Pacific Coast; the fishing being done on many intermediate waters. I filled my fly book with about fifteen standard patterns and many duplicates. I fished a few trout streams in New York, more in Northern Wisconsin, and many in Minnesota, Colorado, Montana, Idaho and the Pacific Coast States, yet found my stock of flies, indiscriminately used on all waters, sufficient and effective under all the varying stream conditions.

WE have been told from angling-time immemorial, by writers on fishing, to scrutinize the color (not the size or form) of the live in-

sects hovering over the water, and to use flies of similar coloration. An excellent common-sense idea, but experience also tells us that the live insects we see on the stream are, as a rule, either drab, white or grayish in color, and that very often a black, red or yellow artificial,

when cast will kill under these conditions more readily than flies dressed in the modest Quaker garb.

I do not decry the practice of imitating the natural fly, but as a hold-fast theory I am disposed to discount it.

W. C. HARRIS.

NOTABLE PERFORMANCES AND RECORDS

Conducted by Charles Edward Patterson

IN point of activity in track and field sports, September is second only to May. In the month just closed, important games were held under the auspices of the Knickerbocker A. C., on the 3d; the Metropolitan Association of the A. A. U., on the 8th; the Amateur Athletic Union (amateur championships), on the 15th; the Canadian A. A. U. (Canadian championships), on the 22d, and the New York A. C. on the 29th.

THE NATIONAL CHAMPIONSHIPS.

THESE games were held on Columbia Field (formerly Manhattan Field), New York City, on Saturday, September 15th. The day was cool and cloudy, and the wind did not favor the sprinters. As the majority of the best college athletes went abroad this summer, and therefore have been surfeited with competition, there were fewer present than usual.

The annual evidences of lack of training were abundant. Men train for the college games in the spring with great fidelity, but for the National championships, most of them make scant preparation.

The most notable performances of the day were those of Long, Orton and Horgan.

LONG met Duffey in the 100-yard dash, the latter showing no trace of any breakdown. Duffey held his lead for 95 yards, when Long came out and won by 6 inches in even time. (See the writer's comment on Duffey's staying powers as set forth in *OUTING* for September.)

Orton, for the sixth time in eight years, won the one-mile run over the same track on which his curly head came bobbing home in front of Conneff in '92. The time was not fast, but Orton is always a racer, records being secondary matters. There have been faster American milers than he—for example, Conneff, or Cregan at top form—but never a better man in the actual running of a race.

Horgan, the British champion, landed in America on Friday night, and, desirous of seeing the sights, had been all the morning en route to the field. R. Sheldon, ex-Yale and now of the New York A. C., and W. W. Coe, Princeton Prep. School, were his antagonists. Sheldon had met him twice before—in the English championships in 1898, when he visited England and took second place, and in July, 1900, when he defeated Horgan. The latter claimed to have been out of condition, and visited this country with the avowed purpose of regaining his laurels. Sheldon might have set up an equally valid claim on this occasion, for the giving out of a muscle in his right hand compelled him to compete with that useful member strapped up in about a yard of surgeon's plaster.

EACH man had six puts, and the result far surpassed anything ever done in the history of athletics. At previous championships the winner has been in a class by himself, second and third men, or at least the latter, falling much below the record of the first man. In this contest, however, all the puts were of so high a class that they are worthy of presentation:

Sheldon.	Horgan.	Coe.
42 ft. $\frac{1}{4}$ in.	*Foul.	43 ft. 11 in.
43 ft. $11\frac{1}{2}$ in.	*Foul.	42 ft. 9 in.
44 ft. $4\frac{3}{4}$ in.	43 ft. $6\frac{1}{2}$ in.	42 ft. 10 in.
44 ft. $2\frac{3}{4}$ in.	46 ft. $1\frac{1}{4}$ in.	44 ft. $9\frac{1}{2}$ in.
43 ft. $9\frac{1}{4}$ in.	44 ft. $9\frac{1}{4}$ in.	45 ft. $\frac{1}{2}$ in.
44 ft. 8 in.	45 ft. 10 in.	44 ft. $3\frac{3}{4}$ in.

*About 44 feet each.

This was great shot putting, even though the missile was found to be slightly under weight.

The inauguration of junior championships was a notable feature, and one which promises to be of permanent value. These are open to men who have never won a National championship. The rules should also debar cross-country, Canadian, intercollegiate and foreign amateur champions.



Denis Horgan, 16lb.-Shot World's Record, 48 feet, 2 inches.

SUMMARIES of the senior championships:

One Hundred Yard Dash—Won by M. W. Long, New York A. C.; A. F. Duffy, East Boston A. A., second; W. G. Edwards, Knickerbocker A. C., third. Time, 10s.

Eight Hundred and Eighty Yard Run—Won by Alexander Grant, New York A. C.; T. G. McGirr, New York A. C., second; Walter Grady, Pastime A. C., third. Time, 2m. 45s.

Two Hundred and Twenty Yard Dash—Won by W. G. Edwards, Knickerbocker A. C.; P. J. Walsh, New York A. C., second; M. W. Long, New York A. C., third. Time, 22 2-5s.

One Hundred and Twenty Yard Hurdle—Won by R. E. Hutchinson, Princeton University; R. H. Hadfield, Knickerbocker A. C., second; I. K. Baxter, New York A. C., third. Time, 16 1-5s.

One Mile Run—Won by George Orton, Philadelphia; Alex Grant, New York A. C., second; A. McKenzie, Jr., Pastime A. C., third. Time, 4m. 42 2-5s.

Four Hundred and Forty Yard Run—Won by M. W. Long, New York A. C.; O. C. Ordwein, Pastime A. C., second; D. J. Brennan, Pastime A. C., third. Time, 52 3-5s.

Two Hundred and Twenty Yard Hurdle—Won by H. Arnold, Union Settlement A. C.; R. H. Hadfield, Knickerbocker A. C., second; P. A. Sayles, Knickerbocker A. C., third. Time, 27 2-5s.

Five Mile Run—Won by A. L. Newton, New York A. C.; "Dick" Grant, Boston, second; Garry Fitzgerald, Star A. C., third. Time, 27m. 41 2-5s.

Running High Jump—Won by I. K. Baxter, New York A. C., 6ft. 1in.; Daniel Reuss, Knickerbocker A. C., second, 5ft. 9in.; W. Drummond, Pastime A. C., third, 5ft. 7in.

Running Broad Jump—Won by H. P. McDonald, Knickerbocker A. C., 22ft.; R. J. McKinney, Pastime A. C., second, 20ft. 10in.; E. B. Bloss, New York A. C., third, 20ft. 9in.

Pole Vault—Won by Bascom Johnson, New York A. C., 11ft. 3in.; A. G. Anderson, New York A. C., second, 10ft. 6in.; I. K. Baxter, New York A. C., third, 10ft.

Putting Sixteen Pound Shot—Won by Denis Horgan, of Ireland, 46ft. 1 1/4in.; W. W. Coe, Princeton Prep. School, 45ft. 3/4in., second; Richard Sheldon, New York A. C., 44ft. 8in., third.

Throwing Fifty-six Pound Weight—Won by J. S. Mitchell, Harlem Rowing Club, 35ft. 5in.; Richard Sheldon, New York A. C., 33ft. 8in., second; R. J. Sheridan, Pastime A. C., 31ft. 6in., third.

Throwing the Discus—Won by Richard Sheldon, New York A. C., 114ft.; R. J. Sheridan, Pastime A. C., 108ft., second; John McCarthy, Pastime A. C., 104ft., third.

Throwing Sixteen Pound Hammer—Won by R. J. Sheridan, Pastime A. C., 138ft. 2in.; J. S. Mitchell,

Harlem R. C., 136ft. 3in., second; W. D. Hennen, New York A. C., 119ft. 10in., third.

It is given to few men, in the short span of life between seventeen and twenty-one years of age, to accomplish what Maxwell W. Long, of the New York Athletic Club, has done. Only four years ago he burst like a meteor in the midst of a galaxy of athletic stars, and from his very first race, although but a boy, was pronounced a formidable rival of the speedy T. E. Burke. He has "gone from strength to strength," responding gamely to all calls upon him, until he now finds himself the well-merited amateur champion short-distance runner of the world. And, to crown a summer of achievements never equaled except by L. E. Myers, he has swept aside, in a resistless burst of speed, the record of the great world's champion of the early 'eighties—standing these nineteen years. On October 15, 1881, Myers ran 440 yards on a circular track at Stenton, Pa., in 48 3/4s. The track was none too good, and a heavy wind blew so fiercely down the home stretch that Myers at one point in his trial almost abandoned the task. Spurred on by the spectators, he renewed his effort and set up the figures which have withstood the assaults of such masters as Wendell Baker, W. C. Dohm, W. C. Downs, G. B. Shattuck and Burke for nearly a generation.

At Travers Island, September 29th, Long, on a day cool and damp and after nearly six months of continuous performance (conditions hardly favorable for record-breaking), toed the mark with a bunch of men well handicapped, and with P. J. Walsh, the fleet-footed Mercury-Foot

sprinter, especially assigned to draw him out for the first 250 yards.

Getting a splendid start, his long, strong stride brought him at the heels of the field at 125 yards. At 250 yards, or just past the first curve, he had passed all but three men; at the foot of the back stretch he was in the lead, and, sweeping round the lower curve, he came up the stretch and over the line in a sensational burst of speed which brought the spectators to their feet with cheers.

The timers, all men of proved capacity, compared watches as follows: J. H. Abeel, 47 4-5s., Robert Stoll, 47 3-5 plus (*i. e.*, the hand stopped half-way between 3-5 and 4-5, say, about $\frac{3}{4}$); E. J. Wendell, 47 3-5, and the slowest time was selected.

FOLLOWING his remarkable performance at Travers Island, Long, on the 4th of October, 1900, at Guttenburg, N. J., established the world's record for the quarter-mile straight-away in 47 seconds.

The track selected was that which was formerly used for horse-racing at Guttenburg on the Palisades. The top soil was removed from a straight quarter-mile stretch until it formed a level clay surface, with a slight rise from the start for the first 300 yards, and a slight decline in the last 100 yards. Every care was taken to ensure accuracy in measurements. The course was officially surveyed and measured by a committee of the A. A. U. and the N. Y. A. C.

The referee was J. E. Sullivan, A. A. U., and the official time was taken by E. J. Wendell, C. Dieges and R. Stoll.

Long has therefore wiped out the world's record of 48 $\frac{1}{2}$ s., made by Tindall, of Cambridge Univ., England, on a circular track in 1889 and by E. C. Bredin in 1896, as well as the straight-away time trial of 47 $\frac{3}{4}$ s. made by Wendell Baker, of Harvard, in 1886.

During his European trip his competitions were:

London—440-yard run; English championship. Winner, 49 4-5s.

Paris—400-metre run; World's championship. Winner, 49 2-5s.

Liverpool—220-yard handicap, in heats. Winner, from scratch, 22 4-5s., around a turn.

Manchester—100 yards, on grass; Salford Harriers. Winner, 10 2-5s.

Royton—440-yard run, winner. 100-yard run, winner. 220-yard handicap, winner.

Stoke-on-Trent—440-yard run. Won in the rain, 49 3-5s.

Glasgow—440-yard run. Winner, 49 4-5s.; new Scotch record. 100-yard handicap, second place. 220-yard handicap, winner.

Isle of Man—440-yard handicap, on grass. Winner, 49s.

Whitehaven—220-yard handicap, on grass. Winner, 22s., around a turn.

Belfast—100-yard handicap, second. 300-yard handicap, second.

Bolton—220-yard handicap. Winner, 22 2-5s.

In addition to these successes Long won the Metropolitan championships, at New York, in the 100-, 220- and 440-yard runs; the National championship at 100 yards and 440 yards.

BURKE, B. J. Wefers and Long have at one time or another been compared with Myers. Wefers was certainly faster up to 300 yards, and Long quite as good in the dashes. As to the quarter-mile, it is hard to judge. Long's time is, of course, much better; Burke's best was 48 4-5 on a bad track. They both had the advantage of superior training methods and of better tracks than Myers.

There can be no doubt, however, that Myers as an all-round performer remains peerless. He could run the dashes in even time, and was a remarkable man up to and including two miles. On one occasion he won the National championship in the 100-, 220-, 440- and 880-yard runs, and then offered to go out the next day and win the mile if the committee would postpone it—and there is no doubt that he could have done it.

John Flanagan also took honors on September 29th, by again raising the world's record for the 16-lb. hammer from 167ft. 8in. to 169ft. 4in., and nearly taking the life of this humble scribe in the doing of it. Unless something is done to stop him, his club will soon have to add a few acres to its Travers Island property.

E. C. Schaefer, the record-making swimmer of the New York A. C., added another laurel to his crown by winning the National swimming championship 100-, 220- and 440-yard events; also securing second place in the mile. For 100 yards, he made the new record of 1m. 5 3-5s., thus superseding by 3s. the previous one held by himself.

SUMMARIES of the National swimming championship and the two-mile steeplechase:

One Hundred Yards—Won by E. C. Schaefer, N. Y. A. C.; W. C. Miller, K. A. C., second; Joseph Ruddy, K. A. C., third. Time, 1m. 5 3-5s.

Two Hundred and Twenty Yards—Won by E. C. Schaefer, N. Y. A. C.; F. A. Wenck, N. Y. A. C., second; G. Goodwin, K. A. C., third. Time, 3m. 7 1-5s.

Four Hundred and Forty Yards—Won by E. C. Schaefer, N. Y. A. C.; G. W. Van Cleaf, K. A. C., second; Thomas J. Callahan, K. A. C., third. Time, 6m. 52 4-5s.

Eight Hundred and Eighty Yards—Won by W. G. Douglass, New York City; J. W. Spencer, Columbia University, second; L. Fitzgerald, Jr., N. Y. A. C., third. Time, 14m. 45 3-5s.

One Mile—Won by G. W. Van Cleaf, K. A. C.; E. C. Schaefer, N. Y. A. C., second; W. M. Jarman, National S. A., Philadelphia, third. Time, 34m. 3-5s.

Two-Mile Steeplechase—Won by Alexander Grant, N. Y. A. C.; A. L. Newton, N. Y. A. C., second. Time, 12m. 19 2-5s.

GOLF

THERE was an attempt, at one time, in the early history of our game of golf, to impart the manners and methods of the professional ball-player and the horse-jockey, and to make them a recognized factor in the game. We were fortunate, however, in having as our first amateur champions, gentlemen who discountenanced entirely this spirit. There were men, and there are still men, who play golf in this same boorish fashion. This year's amateur champion, it is a great pleasure to note, is a model of golfing etiquette. He walks, talks and plays quietly. Talks, indeed, almost not at all. That's as it should be in a serious match. On the tee, he takes pains to be well out of eye-range of the other player when he drives. After playing himself he steps to one side and stands quietly until both balls are well away. On the putting green he walks to his own ball and stands immovable until the other man has played. If he has made a poor shot, or finds himself in a bad lie, he treats us to no hysterics, makes no attempt to call attention to his misfortunes, but plays as best he may. He never goes stalking along after his own ball before his opponent has played—one of the most annoying breaches of etiquette of the golfing bumpkin.

In a word, Mr. Travis is exactly what your opponent at golf should be. The only objection to him as an opponent is his habit of playing so consistently well. We strongly recommend his bearing on the links to all golfers, particularly to those who look upon the liberal profanetization of their own and stranger golf links as a graceful and generous distribution of vocal fertilizer.

THERE is one, and a very important phase, of the game in which there has been little or no improvement. Mr. Balfour, who, it was once chronicled in an English journal, had been presented with "a full set of silver-plated caddies by an admiring constituency," no doubt is the only golfer who ever had an ideally satisfactory change of caddies. Those of us who have not been thus equipped for the game still suffer from their ignorance, indifference and carelessness.

The caddie's duties are, roughly, to make your tee, to follow with his eye the flight of your ball, to direct you to it, and to take the flag from the hole and to stand quietly while you make your putt. When two are playing, the caddie of the player who is nearer the hole should take out the flag and stand at the hole. On my own home links a caddie who was rebuked for not removing the flag from the hole

at the proper time, replied that each caddie was to remove the flag nine times in the round, and that he had done his half of the work! Imagine the comfort of playing, helped by a caddie who is busy during the progress of the game in calculating just how little he can do.

When golf was in the making, the caddie's position was taken by a friend, and he aided his companion-in-arms to win the victory. The rules still permit, as a consequence of this, that one's caddie, and he only, may give advice. Then, in the gradual evolution of the game, the caddie came to be a paid assistant. He was still, however, looked upon as a sort of friend-servant. He must be obedient as a servant, but he must be also interested as a friend. Otherwise the whole charm of a real caddie is lost. He ought to be as much interested to see his side win as the players. He ought not to be thinking how little he can do, but how much he can do to bring about this result. Otherwise the caddie only adds another burden to the player's already heavy and nerve-destroying responsibilities.

IF the player must be forever looking out for his caddie, calling to him for a club, pointing out to him where the ball is, shouting to him to watch for the ball, ordering him to take out the flag, why, then such an one is merely a bag-bearer; he is in no sense a caddie—much less a "silver-plated" caddie!

To some extent this is our own fault, but it is due also in part to the fact that we live in a democratic country where the assertion of one's individualism is rather favored than restrained. The American caddie finds it difficult to bury his own personality in the success of another, even for a short time; so, be it said, does the caddie's father and mother. He comes by it straight enough. On the other hand, he is paid for his services, and in many communities the wages of the caddie make a notable increase in the comfort of the home. It is due to him, quite as much as to the player, that he should be required to do his duty, to learn his place in the game and to play his part with unswerving attention. So far as this is not done the players are at fault, and in many cases they are at fault.

It remains for some well-organized and prosperous club to make arrangements with some of its members to instruct the caddies, and to enforce certain rules concerning them. If this is not done they will remain, what many of them are now, merely the "chartered libertines" of out-of-door hobbledehoydom.

PRICE COLLIER.

THE AUTOMOBILE

ALTHOUGH progress in motor vehicle construction is made every day, somewhere, it remains true, as yet, that there is more automobilism in the air than on the roads, more on paper than in the factories.

Automobiles and "automobilers" that are making records on race-tracks with specially built machines, are demonstrating the intensity of a fancy more than its justification; but there is no evidence that the progress of the year 1900 has, so far, given birth to any vehicle capable of arousing a hard-headed, utilitarian sort of enthusiasm in its owner.

Yet there is no doubt advancement is made, a little here and a little there, in a hundred places. But each designer holds on to his own with jealous care, and what with legal patent prohibition and shop secrecy, it takes a long time to leaven the whole internecine fraternity of automobile builders with the progress of its individual members.

The composite of their brains might probably to-day construct the vehicle which would convince the most doubtful Thomas of the virtues of the automobile in all of its three principal types, and of the superiority of each one in its particular field over horse-traction.

But composite brain-work is as far from realization in mechanics as in politics. Meanwhile, a great deal of satisfaction may be obtained from the less perfect automobiles that are produced by efforts that appear purely individual, inspired but not taught as are the designers by holding their "ears to the ground" over which automobiles are rolling.

THE sport of automobilism seems to drift farther away every day from that other aspect of the motor-vehicle movement which bears upon the part automobiles will play in the economy and pleasures of the nation. Its undercurrent is rarely the true spirit of sport, which only loves display of individual faculties for the sake of their further development. But it is, first of all, the commercial instinct, and, secondly, a none too intelligent thirst for a genteel sort of notoriety. The race-track sport of automobilism at the present moment is largely an accident, due to the recollection of what the cycle sport did for the cycle industry. The features that produce high speed are frequently directly antagonistic to general utility.

Still, the ruling majority will undoubtedly continue to look upon automobile races as a worthy addition to sporting events, and those who realize that the racing is premature can do nothing better than bow to the facts of the fashion, appreciative of the popular interest which

the track events contribute to the movement in general.

The recent races at Guttenberg, N. J.; Chicago, Ill., and Trenton, N. J., in all cases gave victory to vehicles which could not be seriously considered available for any but speeding purposes, and demonstrated the need of vigorous and incisive action by a governing body to check the riotous prevalence of commercial influences.

Of the steam vehicles alone could it be truly said that they were adapted for ordinary travel, as well as high speeds on a smoothed surface.

WITH reference to the steam vehicles, the experience of the past half-year has brought out sharply two questions: Will it be possible to find a suitable disposition of the comparatively bulky engines, boiler and tanks, so as to give the vehicles, in addition, some carrying capacity? And will the public in general meet the constructors half-way, by acquiring the knowledge of engineering needed for operating them successfully and obviating too-frequent repairs? The degree of knowledge and skill demanded is not excessive, but its possession is peremptory.

It has become a mooted question whether the wide use of steam vehicles would or would not be facilitated by resorting to a somewhat heavier construction than that—the lightest of all automobiles—by which it was first introduced to the public's favorable notice.

Many designers are leaning toward a general strengthening of parts as an offset to the carelessness of users, but by this policy one of the most catching points in the attractiveness of the steam automobile, as it has been evolved in the United States, must be partially sacrificed.

While the electric carriage is constantly proving and improving its adaptedness for certain lines of city work, its limited freedom of movement takes it every day more distinctly out of the field of sport, pure and simple. A recognized element in urban and suburban transportation, and capable of the highest speeds, if built specially for such, it opens no new vistas for those who are looking to automobilism for a broadening of their means for enjoying the fulness of living.

THE gasoline vehicle, on the other hand, crude in comparison and tricky when operated by any but highly experienced chauffeurs, is captivating the fancy of all who love to dwell on future possibilities, and an immense amount of work is going on in hundreds of workshops with a view to realizing the expectations that twine around the main principle of its construction.

FOR THE SPORTSMAN'S LIBRARY

(Fox) "*Hunting*," by J. Otho Paget. J. M. Dent & Co.

THE breeding of hounds has been the study of the author's life and fox-hunting his enthusiastic hobby—as a consequence his knowledge of the best British kennels and their traits, and his advice on selection for breeding and the training of the foxhound, are well based, and to American readers form probably the most valuable portion of his book, notwithstanding the extremely practical hints with which the chapters on "The Master" and "The Riding" abound. There is no chapter, indeed, of "*Hunting*" which will not amply repay perusal.

"*The Early Mountaineers*," by Charles Gribble, illustrated by Fisher Unwin.

TO erudition Mr. Gribble joins practical knowledge of his subject, and as a consequence "*The Early Mountaineers*" contains a veritable mine of history and adventure. How they overcame the difficulties inherent to first ventures, who traced the paths now followed in comparative safety, who designed the mechanical aids to climbing now common, what each succeeding mountaineer, from the Eleventh to the Eighteenth Century, has added to the sum of the world's knowledge is measured by an expert and expressed lucidly. It is a book which Appalachians will turn to, and return to, with profit, on all matters connected with the early climbing of the Alps, the Appenines and the Pyrenees.

"*Prehistoric Implements*," by Warren K. Moorhead. Robert Clarke Co.

THIS is a reference book eminently interesting to sportsmen, illustrated with 621 figures showing 3,000 specimens of the utensils and implements of pre-Columbian man in America. Of these the greater portion were used in the chase or in fishing. The various methods of these early Nimrods and Waltons possess more than a passing interest to the sportsman of to-day, and Mr. Moorhead's labors have made the acquisition of a knowledge of them easy. Every locality is separately indexed and the various implements grouped and arranged with commendable clearness.

"*Croquet Up to Date*," edited by Arthur Lillie (with illustrations). Longmans, Green & Co.

TO the average American, whose recollections of the croquet of a quarter of a century ago are hazy, this book will be a revelation. To the select band who have here kept alight the lamp and brought the game to a high state of scien-

tific perfection, it will be a welcome harbinger of a renaissance. To both classes it will give in a clear, pleasant, succinct and well-illustrated manner, much valuable information on croquet as played to-day on special grounds, and with an accuracy more nearly approaching billiards than the garden game of the early 'sixties. Unquestionably croquet has revived to stay in other parts of the world; there is room for its extension here.

"*The Natural History of Selborne*," by Gilbert White. Macmillan & Co.

GEORGE WHITE, who was the Vicar of Selborne in Hampshire, England, at the end of the last century, was of the class of naturalists of whom Thoreau and Burroughes are our American examples. He could invest the common objects of his garden and of the woodlanes and brooksides with an interest which has for a century given pleasure to thousands the world over, and make fascinating the memoranda made day by day of the habits of the neighboring birds, quadrupeds and insects. The edition is free from the footnotes which mar most of the modern ones, and is typographically clear and pleasant to the eye.

"*Familiar Fish, their Habits and Capture*," by Eugene McCarthy. D. Appleton & Co.

THIS is a practical book on fresh-water game fish, which the practical angler will pass by but many a beginner be glad to have. It gives, in simple language and illustrations, much that it will be profitable for our boys to know before they begin to lay out their money, and much information that will be useful to them when they begin to go farther afield than their own immediate local waters; of which every boy finds out the most he wants to know for himself. The appendix contains a useful table of open fishing seasons.

"*Concerning Cats, My Own and Some Others*," by Helen M. Winslow. Lothrop Publishing Co.

WHATEVER of good report and useful, and historical or artistic, or about pussy's characteristics can be said, is said by an enthusiastic cat-lover, and well said. Furthermore, it is a practical book, and whoso wishes to know about high-bred cats in America or in England, or of the cat clubs and shows, or the diseases and treatment of cats, their hospitals and refuges, will find it in full within the covers of "*Concerning Cats*." The photographic illustrations are superb.

SEASONABLE OUTING CLOTHES

By "How"

EVERY season has its particular sports and every sport its dress, upon which is dependent not only personal appearance, but comfort and enhanced pleasure.

As regards shooting the kind of costume will depend very much upon the character of the country to be shot over, for a suit which will answer every purpose in a smooth, open section will not stand the rough work of rocky hills and thickly-overgrown woods.

For bird-shooting over an easy locality there is nothing better than a Norfolk jacket, or jacket of the semi-Norfolk type, made of Scotch tweed, with full knickerbockers, heavy ribbed golf stockings, light canvas shooting gaiters and stout tan shoes. I should advise either a soft felt hat without binding, or a tweed cap with a fairly long, low vizor. The jacket, which may be worn over a negligé shirt or a light sweater cut low at the neck, should be so loose as to permit of perfect freedom to the arms, and, in place of the ordinary belt, a cartridge belt of canvas or very light leather will be found convenient. The jacket may be of the usual Norfolk kind or have a shoulder yoke, and there should be large patch-pockets.

In a rough, thickly-wooded country a cloth shooting suit is of little service, as the material is extremely likely to become torn and cut. I have seen some khaki coats and breeches, heavily strapped, that would stand the wear well enough, and one may also use mole skin, brown canvas, or heavy brown duck. The pockets and seams of the coat should be reinforced. A cap which sets close and snug to the head, or an old-style "deer stalker," makes the best top covering. In place of wool stockings I should advise light leather putties, heavy cloth putties, or the ordinary high canvas leggings, above thick-soled, heavy and stoutly made boots. For duck-shooting I should advise a dark brown or green shade of cloth, a heavy wool sweater and light rubber or waterproof canvas high boots, reaching well up the thighs.

FOR the sports of tobogganing, snow-shoeing and skeeing, an exceedingly picturesque costume is designed, made of blanket flannel, and it may be had in a variety of colors. Red and black, or white and blue are particularly pretty.

The coat is usually made to button high up to the neck, and has a hood lined to match the buttons and the binding of the coat. It may be either single or double-breasted, and is cut square in front. Knee breeches of blanket flannel, usually with binding on the outer seam and lines or stripes of the contrasting color at

the bottom, are worn, and the stockings of heavy wool also match the trimming of the suit in color.

For snow-shoeing the moccasin is the only foot-wear, with heavy wool stockings over socks of lighter weight, but for tobogganing or skeeing, stout boots are decidedly to be preferred. The most serviceable gloves are of wool with a light fleecy lining, and the regulation cap is the toque with hanging tassel of color.

Unlike the other winter sports skating has no especial costume, unless it may be said to be that usually worn for hockey, which consists of jersey, sweater, light knickerbockers, wool stockings and heavy boots of black or tan leather. In the city rinks it is perhaps more usual to wear an ordinary sack suit for skating, but out of town, knickerbockers and ribbed stockings of Scotch wool, with a low-cut sweater, stock and a Norfolk or sack jacket is the best looking as well as the most comfortable attire.

Men who skate much usually have their skates permanently fastened to the skating boots, which prevents all slipping and makes it impossible for the skates to come off.

THE regulation hunting costume (I have always thought its long coat and high hat ridiculous) needs no especial description, but there are several riding garments deserving of note. For a full suit a gray or brown cashmere or tweed, indistinctly check-lined, is good looking. The coat should have a well-defined waist-line, the seam running around the sides above the pockets and forming a slight point at the edges; skirts full and cut to hang well around in front. There should be four buttons, the last of which is placed at the point of the waist seam, and one, two or three buttons on the sleeves. The side pockets set directly under the waist seam should be rather large, and have square flaps. The breast pocket also with flap set rather high. Breeches of same material, cut very full over the thighs and very tight at the knees, strapped with buckskin and buttoned directly in front. Either boots or riding gaiters may be worn, and a Tattersall waistcoat, cut high, to show a bit of color between the coat edges and the stock looks well. The hat should be a derby with string guard, and the gloves of tan dogskin.

A slightly more formal riding suit may consist of a dark-gray Oxford mixture coat, buckskin or whipcord breeches and high boots. As an outer coat a full-backed covert with the ordinary or raglan shoulder seams and invisible pockets is the most correct.

THE HARNESS HORSE

ANY man who, ten years ago, had predicted that the time would come when the 2:10 classes would ever be as numerous as were the 2:30 of those days, would have called down upon himself the irony and abuse of every turf writer in the country. Such a result is at hand, however, and even now the list is very large; while the 2:20 classes, averaged throughout the country, will be found the slowest for which public money is offered.

To the ingenuity of man must be awarded eighty per cent. of the merit for the extreme speed now shown at the trot and pace; and, curiously enough, the very ease with which these results are obtained through the application of specially designed appliances has been distinctly to the horse's detriment—the physical progress of the animal has been in inverse ratio to his speed, and the fast horses of to-day, which are only fast because of extraordinary bits, checks, boots, weights, gaiting poles, hobbles, etc., are legion.

The much- and rightfully-abused hobbles have caused more accidents, injured more horses and men, and produced more extreme speed than all other appliances put together. Eliminate from the fast-pacing classes to-day the animals that wear the "Indiana pants," as they are called by the railbirds, and not a corporal's guard of fast horses will remain. These animals are, of course, virtually useless for anything but harness racing, and only the public craze for extreme speed, no matter how obtained, has enabled these spliced-legged brutes to extensively occupy the public eye, and to usurp the place belonging only to the pure-gaited, level-headed, smooth-going, harmoniously-constructed trotter.

IF we have been breeding trotters for fifty years on scientific principles, and results prove that only by the most artificial means can extreme speed be obtained, the question naturally arises, has success or failure rewarded our efforts? The general verdict of enthusiasts would be for success—the watch being the standard—but to the unbiased horseman the necessity of the means employed, the lack of style and beauty so general in the product, the uncertainty as to inherited gait, the frequent physical defects which prevent clear action, the lack of harmony in size, type and conformation among animals identically bred, give ample ground for criticism and comment of adverse character.

MUCH gratification was expressed by horsemen at Mr. W. C. Whitney's generosity in offering \$500 at the National Horse Show for the

stallion best calculated to get carriage horses, and a vastly interesting and important struggle was anticipated. It turns out, however, that the Hackney is barred and the contest is thus robbed of all its importance—for no test is fair where any would-be contestant is discriminated against.

The hackney men are by no means cast down, as they take the ground that their animals were barred in order to give others a chance, and because their horses could be beaten in no other way! Certainly at a "National" show it is most unfortunate that a prize so restricted should have been offered.

THE world does not care a straw what variety produces the best—it wants the best horse—and his origin is absolutely immaterial. Surely, therefore, representatives of all breeds should meet upon an equal footing, free from bar or hindrance, and the best individual win. Another unfortunate restriction in the conditions is that which requires that all contestants must be registered in the stud-books of their respective breeds.

Apropos of such classes, and in view of the fact that the Government is doing nothing to advance the interests and to provide for the proper production of the heavy harness horse of the future, all horse shows should take the matter actively in hand. Unquestionably a class like this could be, both locally and generally, worked up throughout the country. "Prize of \$——. For stallions of any breed suitable for getting heavy harness horses. Entrance fee, the stud fee received for the service of the contestant. Sweepstakes, all to the winner." With proper manipulation, such a class could be made a success everywhere. The stallion which had never been used in the stud should enter at the cheapest fee named in the entry lists.

THE same classes should be arranged for sires suitable for getting hunters and saddle horses, but with all the fences down as to stud-book registration. Judges who are competent to decide upon such classes are perfectly well able to decide upon the desirability of an animal's blood-lines and relationship, and all such matters may be safely left to them.

The main object to attain is the speedy and broad-gage encouragement of wholesale producing of fine horses of all grades—which industry is absolutely essential to the best and steadily increasing export trade we are carrying on with all countries, and in which America should be as pre-eminent as she is in all the other avenues of trade,

F. M. WARE.

THE THOROUGHBRED

PROBABLY the most important feature of the American racing season of 1900 was the inaugural running of the Annual Champion Stakes at Sheepshead Bay. A \$20,000 event for the senior horses, at two miles and a quarter, is verily a remarkable addition to our fixtures, and it may be said that the new stake is particularly welcome for the reason that it indicates a growing tendency for long-distance racing.

The success of the "cherry and black" of Mr. Pierre Lorillard was nothing short of perfect from a sentimental point of view, for Mr. Lorillard has been one of the most enthusiastic and beneficial patrons of the American turf during the present generation, and has conducted himself—through both good luck and bad luck—like the thorough gentleman-sportsman which he is.

David Garrick, the winner of the first Annual Champion, is a really high-class race-horse when in the humor to run, and those who know him best expect him to accomplish really great things upon English courses, which should be better suited than our American race-tracks to both his conformation and disposition.

COMMANDO, Tommy Atkins, Ballyhoo Bey, Kilmarnock, Elizabeth M., David Garrick! It is surely no occasion for wonderment that the transfer of these and other well-known horses from American to English race-courses should be viewed with unfeigned consternation by those most interested in the American turf. The policy of offering comparatively mediocre prizes for the senior horses is the primal cause of the alarming exodus, however, and we may expect to see an annual repetition of the situation until something like an adequate provision is made in America for the best class of horses after their two-year-old career.

While Mr. James R. Keene's Commando failed to round out the full glory of his juvenile career by capturing the valuable Matron Stakes at the recent Morris Park Autumn meeting, the great son of Domino thereby lost none of the esteem of the closest followers of racing, his defeat by Beau Gallant having been most unfortunately brought about by the careless riding of Mr. Keene's first jockey, Spencer. Something of a parallel in recent turf history is to be found in the unfortunate blunder of Mornington Cannon, the English jockey, whereby the great Flying Fox was defeated by St. Gris in the Imperial Produce Stakes at Kempton Park in 1898. Jockeys are only human, to be sure, but one would naturally expect them to

ride with becoming care for their employers' interests in \$20,000 races, at least.

The Matron stakes may be confidently ignored in estimating the true juvenile status of the smashing representative of "white blue spots."

American jockeys are winning laurels on the continent of Europe as well as in Great Britain. "Cash" Sloan (elder brother of the redoubtable "Tod") and Freeman have won important events in France, while Morgan—the half-breed Indian who rode so well at the Aqueduct spring meeting of 1899—has been very successful in Hungary, and is understood to be meditating the acceptance of offers which will cause him to locate there permanently. The American seat, which may be briefly described as the "crouching" attitude, is everywhere demonstrating its superiority over the formerly accepted methods of race-riding. Such English jockeys as have had the good sense to adopt it are showing a gratifying and convincing increase in their winning percentages.

THE brilliant successes of America upon the English turf in 1900 have not been confined to the jockeys and trainers, for the American-bred horse has been frequently in evidence, the most notable success being that achieved by Mr. James R. Keene's three-year-old Disguise II. in the £10,000 Jockey Club Stakes at Newmarket in September. Disguise II. is the second foreign-bred horse to win one of England's "ten thousand pounders," the French colt Le Justicier having captured the Eclipse Stakes at Sandown Park in 1895 for Baron Schickler. America scored doubly in Disguise II.'s race, for the second horse, Jolly Tar, was bred at Mr. Pierre Lorillard's Rancocas farm in New Jersey.

While the public breeding-studs of America offer the great bulk of their yearlings early in the summer, the English youngsters are mainly sold at Doncaster in September. This year's sales during the Leger week, while producing no phenomenal prices, were thoroughly successful and encouraging. In view of what our jockeys, horses and trainers have been doing abroad, it is especially interesting to note that the highest-priced yearling of Doncaster week was purchased by the American sportsman, Mr. James R. Keene. The youngster was the Gallinule—Tragedy colt in Sir Tatton Sykes' Sledmere lot, and the price (2,500 guineas) is not deemed extravagant, in view of the fact that the colt is quite an improvement upon his full-brother, Wildfowler, who won the St. Leger of 1898.

W. H. ROWE.



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THE PRESENT DISTRIBUTION OF
BIG GAME IN AMERICA

By George Bird Grinnell

NATURE and art are words of opposite meaning, and civilization is art—a violent turning aside of Nature's laws. The operations of Nature and of civilization are certain to clash. They cannot be reconciled. This is a truism, of course, yet sportsmen hardly seem to recognize it, for they are much given to wondering at the scarcity of game, and indulging in speculations to account for its disappearance.

The American savage depended for food in part on the wild creatures of the land and killed of them what he needed, yet the destruction which he wrought in primitive times made no impression on their numbers. This was due in part to the sparseness of aboriginal population, but chiefly to the way in which the Indian regarded this source of food supply. He took the animals for the food or the skins they yielded in the same spirit that he gathered the roots or berries or nuts, or any other crop—to be used—and regarded a wasteful destruction of these animals as unwise and wrong. In buffalo days this was a frequent theme of discourse among the prairie Indians of the West, and I have often heard the old tribesmen descant on the folly and wrong of wasting the buffalo by which they lived.

The civilized man's view-point is quite different. He depends for a living on settled occupations. Hunting is not the business of his life, nor the flesh of wild beasts his support. These creatures are

useful to him only as furnishing pleasureable excitement, or to be turned into money.

During the early days of this country's occupancy by civilized man, the destruction which took place made but slight impression on the game of the whole continent, but any impression made was permanent. The settlers killed off the game and cleared and occupied the land, and so made it impossible for other individuals of the species to move in and by breeding to restock it. Thus the game was always just beyond the settlers—just as were those other wild things, the Indians—and when it disappeared from a district it did so for all time. The rapidity and completeness of any extermination—or migration—varied in different localities and with different species. The settlements might pass by an area ill-suited to agriculture, and such a tract—provided it was sufficiently large—might long shelter some individuals of the species best fitted to survive. Over a great territory of the East certain species by reason of their habits disappeared early—as the buffalo and the elk—while others better able to take care of themselves—like the Virginia deer and the black bear—continued to exist.

Those who have given attention to the matter know that over much of this country of 75,000,000 people there is to-day no longer room for big game, but most of us do not realize how universal is the spread of the settlements, nor how the industries

of farming, stock-raising, mining and lumbering have carried a population into the remotest corners of the land. Here and there remain districts of high, rough mountain land, or of arid and naked plain, where settlers as yet are few, but such regions, where game is yet to be found, may be counted almost on one's fingers.

This industrial expansion is naturally a subject of pride and congratulation to all Americans, but the destruction of wild animal life that goes with it is greatly to

which for many years the native animals of America may flourish undisturbed.

Roughly speaking, there are twelve or fifteen American mammals that may be classed as big game. The number of species and races is much greater, most of the animals named having been described in more than one form. Speaking generically, these animals are the buffalo, musk ox, mountain sheep, white goat, prong-horned antelope, moose, caribou, Columbia black-tailed deer, mule deer,



The Prong-Horned Antelope on its Southwestern Range.

be deplored. A little thought and a little foresight would have enabled us to keep up our stock of game without any interference with the progress in industrial arts which has added so much to our country's wealth and to its importance among the nations of the earth.

It is too late now to talk of that, but it is not too late for the various States to enforce protective laws, nor for Congress to so safeguard the National Parks and Forest Reserves of the land that each of these may become a game preserve in

Virginia deer, elk, the various bears and the panthers.

Size, habits of life and the mental characteristics of different species of game are undoubtedly three of the most important factors which contribute to their preservation or the reverse.

The vast bulk of the buffalo and his tendency to inhabit an open country led to his extermination, notwithstanding the enormous numbers of early days, and it is in the rough and mountainous country that the last remnants now linger of the

hordes that once roamed over America. It took less than one hundred years to sweep the buffalo from the whole country from the Alleghanies westward, except in a few isolated localities. In 1870 the Missouri River was the eastern boundary of their range, but railroads, which had already cut the north and south line of migration at right angles, brought the hide hunters in such numbers that in a very few years there were practically none of the southern herd of buffalo except in the

ty-five. A very few exist in the arid country about the heads of Dry Fork and Porcupine Creeks, in Montana. Up to 1897 or '98 they had somewhat increased there, but then the Red River half-breeds made a raid on them, and are said to have killed thirty-two, no doubt the greater part of the herd. There are supposed still to be one or two little bands of buffalo in the mountains of Colorado. Besides these, there remains only the herd of wood buffalo of the north said to range in



Mule Deer in a Colorado "Park."

Pan Handle of Texas. The northern herd lasted much longer, and it was not until the Northern Pacific Railroad built west of the Missouri River in 1881, that actual extermination began. In two years these, also, were gone.

A few buffalo still linger in the Yellowstone Park, where they were almost exterminated between 1890 and '94, owing to the failure of Congress to pass adequate laws for their protection. These are reported now to number about twen-

a triangular section of country bounded by the Great Slave Lake on the north, by Peace River on the south, and the mountains to the westward. Nothing very definite is known about its numbers. In 1889, Mr. Hornaday estimated that there were 550. Mr. Whitney, who visited this range in 1896, put the number at 150, while Mr. A. J. Stone, who returned from the north in 1900, believes that they do not number more than 50, and that three years will witness their extermination.

He, however, did not visit their range, and bases his opinion only on hearsay.

The musk ox has rarely been pursued for sport, though a few hardy spirits have made the toilsome journey to the Barren Grounds and secured it. All accounts indicate that it is rapidly decreasing in numbers, less through destruction by man than from other causes. It was once a species of circumpolar distribution, which has become extinct except in North America east of the Mackenzie River.

The bighorn has become shy and well able to take care of itself. Can any one tell why this is so? The mule deer and the elk, which were apparently exposed to the same conditions of hunting, never became shy, never seemed to realize what a shot portended. If they did not see or smell the hunter, they would often allow several shots to be fired at them without taking the alarm, just as in much earlier days the sheep would do. But the sheep came to learn that the explosion of a gun



The Elk of the Mountains.

The bighorn was formerly an inhabitant of the open country, living on the upper plains and higher plateaus, and only retreating to the rocks and mountains when alarmed. Fifty years ago it was the gentlest and most unsuspicious of all the Western animals, except the buffalo; yet almost within my time it absolutely changed its habits, and is now for the most part confined to high mountain peaks, and has become one of the shyest of our game animals.

meant danger for him, while the other animals never seemed to learn this. Why should there have been so great a difference in their comprehension of danger?

The mountain sheep has been exterminated over most of its ancient range, but it still exists in considerable numbers in the mountains north of the United States. There are some in the western mountains south as far as Mexico, and they are quite numerous in the Yellowstone Park, where, of course, they are protect-

ed. In Colorado they have increased of late years, being absolutely protected by the State law. In Lower California sheep are quite abundant, and are sometimes killed there, but chiefly by the wholly indefensible practice of shooting them at water holes as they come in to drink. Montana, Colorado and California now have laws protecting mountain sheep for a term of years. Similar laws ought to be enacted wherever the sheep are found.

The white goat is an alpine animal

ern limits of its range, but it still occurs in diminished numbers from the Saskatchewan River south into Mexico. It has suffered less from the hide hunters than the other prairie animals. Its small size renders its skin of little value for trade purposes, and possessing keen sight and scent and great speed it has suffered less from commercial killing than many other species. It is still quite abundant in many parts of its range.

The moose is an inhabitant of swamps,



The Panther in its Lair.

found in some abundance as far south as Central Montana, Idaho and Washington, and abundant in the northern mountains at least as far west as Cook's Inlet in Alaska. The inaccessibility of the country which it inhabits and the worthlessness of its hide and flesh have hitherto protected it from any great destruction.

The range of the prong-horned antelope is now practically limited to the cattle country. The Western Dakotas, Nebraska and Kansas are the present east-

thickets and forests, and is in a degree protected by these surroundings, yet his size is greatly against him. His extermination in the Adirondacks, and his great reduction in numbers in Maine some years ago, indicate that without protection, such as is now given him in that State, he must ere long succumb. The last moose killed in the Adirondacks was taken in 1861, and twenty-five years ago the species had become very scarce in Maine, but wise laws properly enforced

have so brought up their numbers that now moose are common, and Maine is reaping the reward of proper game-protective measures.

Besides its occurrence in Maine and generally through the wooded portion of Canada, the moose enters the United States in the Rocky Mountain region, and still occurs there regularly as far south as the Yellowstone Park, in Wyoming. The most southern record of which I have any knowledge, is that of a moose killed nearly forty years ago about ten miles northwest of Fort Fetterman, Wyoming, by William Roland. This species still occurs in considerable abundance throughout the wooded regions of the North, but the discovery of gold there must greatly decrease their numbers, for miners are penetrating all over the moose's country, and are killing the game for food. The experience of the State of Maine shows that with reasonable protective laws moose will continue to exist, even in a district that is very accessible.

The caribou of the Barren Ground, of course, never reached the United States, but the woodland forms enter our territory in Maine and again at points west of the Rocky Mountains. In these sections they do not seem to have been greatly affected by hunting. The opening of a railway across Newfoundland is likely before long to have a serious effect on the caribou of that island.

The smaller deer of North America are divided into three groups, each containing several species. These three divisions are known as the black-tail, the mule and the white-tail deer groups. Of these, the black-tail are by far the most limited in range, being confined almost entirely to the coast region of the Pacific, where they are measurably protected by dense forests and thickets. They are chiefly killed by the natives for food and by sportsmen, but the State of California has laws protecting the females and young, and the general sentiment of that State is for their protection.

The mule deer and its various forms are wholly Western in distribution. Over much of their range of the plains territory they have been almost exterminated, but they still exist in some numbers in the Rocky Mountains and generally in the mountain country of the West and Southwest. The mule deer has the gentleness

and curiosity of the elk. It used to be extremely abundant, but, like the elk, suffered severely from the ravages of the skin hunter.

The white-tailed deer in its various forms has a far wider distribution than any of our other deer, and furnishes an interesting example of the persistence of a species long after the country which it inhabits has become well settled, and other large game has disappeared. It is still found over the greater portion of the United States, and occurs in small numbers even in the densely populated New England States.

The result of its close contact with man and its experience of his ways has tended to make this species surprisingly acute, so that it is generally acknowledged to be the most difficult of all game to still-hunt. The growing up to forest of many regions once largely devoted to farming—in the Northeast and in the South—tends to furnish cover for this species and to bring it back to districts from which it had once been expelled. Where offered reasonable protection, deer more than hold their own, and increase. That they still flourish in a half-domesticated condition among the summer resorts of Long Island and in the much-frequented country of the Adirondacks is evidence enough of the way in which they can take care of themselves if reasonably protected.

The same conditions that led to the extermination of the buffalo acted, though in a less degree, on the elk. It was formerly largely an animal of the open country, went in considerable companies and was unsuspicious—or stupid—in its nature. It thus fell an easy prey to the hunter, and is known now in comparatively few localities, and only as an inhabitant of the roughest mountains, or of protected country.

The elk is now found chiefly about the Yellowstone Park. There are some in the northern Rocky Mountains, in Colorado, in the State of Washington and on Vancouver Island. There are said also to be a few in Northern California.

It is long since the elk have been exterminated in the East. Dekay quotes hunters as having killed them in the Adirondacks in 1836, but Dr. Merriam about 1880 was unable to find even a tradition of the elk there. The last elk in Pennsylvania was probably killed in 1853.

In 1870, there were some in Michigan, Iowa and Minnesota, but they were few. West of the Missouri River, however, they were still abundant, and in 1873 I saw several hundred less than one hundred and fifty miles west of Omaha. At that time they were abundant almost everywhere on the prairie, and then one scarcely thought of the elk as an animal of the timber. They fed for the most part on the prairie, often lying on the hillside like buffalo or cattle, though at

we do not know. This east and west range was almost as wide for one species as for the other, and, although the deer breeds twice as rapidly as the elk, it would seem from earlier histories and the letters of those fine and fearless old missionaries, whose observations are recorded in the Jesuit Relations, that the elk were formerly much more numerous than the deer.

The case of the black bear parallels that of the Virginia deer, for it appears



Where Moose Linger.

other times they concealed themselves in the willows along the stream. It was then a common practice to run elk as one ran buffalo. By the year 1880 the elk had been pretty much exterminated from the prairie, and there were left only those of the high plateau and the mountain.

If we are asked why the elk was exterminated over almost all of its east and west range, while the white-tailed deer persisted, we shall have to say that, except for the reasons already suggested,

to flourish in the immediate neighborhood of settlement. The long-clawed bears, among which are included the grizzly, cinnamon and the great bears of the North and Northwest, are much less tolerant of the approach of civilization, and are likely to leave a region where they are greatly disturbed. On the other hand, where bears come to feel a confidence in their human neighbors, they are extraordinarily bold. It is but a year or two since there was a bear living at Heart

Butte, Montana, which made a practice of coming into an Indian camp to find what he could to eat. The Indians had no arms, and did not discuss his rights in the premises, but promptly vacated the camp on his appearance. The customs of the bears in the Yellowstone Park, are, of course, well known.

The panther, now chiefly confined to Western America, is very destructive to deer, mountain sheep and mountain goats, as well as to young elk. It is, therefore, not a species that it is desirable to protect, and it is easily killed by being hunted with dogs in winter, the men following on snowshoes, and shooting the treed animal.

The Columbian black-tailed deer, the white-tailed deer and the bears and the panthers are examples of animals protected, like the moose, by their environment; that is to say, by the character of the land which they inhabit. They cannot be seen at a distance; they are likely to hear the approach of anything moving in the forest, and so to be warned of danger and to have the opportunity to escape. Any animal disturbed by the approach of a moving object, and given time to inspect it and to decide that it is something strange and therefore to be feared, is likely to move away. Often this inspection may occupy a number of seconds or even minutes, during which the hunter, if he has seen the game, has the opportunity to do his work. But, on the other hand, when the animal has made up its mind to go, it is very likely to slip away quietly, and so to escape detection and harm.

The love of killing, which seems to be a part of civilized man's nature, and which is often mis-called love of sport, is responsible for much of the slaughter of our wild game. Many years ago I traveled through a country then quite unvisited, and where elk and deer and antelope were extremely abundant. The wagon bumped along over the sage brush, while my companion and I traveled by different routes, apart from the wagon and from each other, toward the camp. All day long I rode through antelope, and spent many interesting hours lying behind the hills and watching their ways. That night, when we met at camp, my companion asked me if I had killed anything. I said I had not, as there was meat in the wagon. Questioning him as to what he had killed, he replied, "Eleven antelope;"

and when I asked him what he had done with them, he said, "Oh! I cut their throats." This was an Eastern man, but a few years in the country.

By no means all the men who traveled through the mountains and over the prairie in those days were of this type, but a considerable proportion were—all of them recent emigrants from the East. They were unaccustomed to the sight of great game, absolutely without respect or reverence for life, and they knew that after them were coming other men, many of whom would feel just as they did. They wanted to get all the game they could, and to leave as little as possible for others. Yet, if the destruction had been limited to those who killed only for their pleasure, the diminution of our big game would have been much more gradual.

Great and wanton as has been the slaughter of big game for so-called sport, this has been but a small factor in extermination. It is the commercial killing which has swept out of existence the wild animals and birds over a large part of the continent, and this commercial killing became possible—because profitable—only when a market was made available for the product, the flesh or the skins. This means, of course, only when civilization was brought near enough—whether by advancing settlements or by the opening of new transportation lines—to make it pay men to kill.

Except in a small way, and locally, there was little or no extensive trading in hides until the railroads penetrated the game country of the West. In other words, it did not pay to haul undressed hides long distances to a market. The traffic on the steamboats which plied the Missouri River from Benton to Bismarck previous to the building of the Northern Pacific Railroad, west of the Missouri River, was not, as a rule, in hides, but in furs and robes; that is, dressed buffalo skins. About 1873 and '74, however, hide hunting became more general, and the river steamboats did carry many hides down the river. When the railroads crossed the river and began to build westward, there at once became a market for the flesh and the hides of game, and it paid men to kill.

As the railroad came along, eager for freight since as yet there was absolutely no traffic on the new line, the traders and

storekeepers began to buy hides and ship them, and then in good earnest commenced the wholesale extermination of everything that wore hair and hoofs. Many a time I have passed wagons carrying stretched and dried elk, deer, antelope and mountain sheep skins, stacked up as high as a load of hay, and these wagons were commonly provided with racks reaching far out over the wheels, so that great loads could be hauled.

These were the days of the new West.

game with which the plains and hills were then covered. I once suggested to an old-timer in Montana that if hide hunting were not stopped there would soon be no buffalo left. He looked at me in a pitying fashion, as if doubting my sanity, and replied, "Lord, my friend, there'll be buffalo a-plenty long after you and me's both dead."

My friend still lives, in the heart of what was once the greatest buffalo range in all the northern country, and as I stood



Buffalo on the Oregon Trail.

Every one of its inhabitants was most actively engaged in the pursuit of the nimble dollar, which he intended to capture by the readiest means possible, but, at all events, to capture. In some of the States and Territories game laws stood on the statute books, but none regarded these laws as having or intending to have any meaning or binding force. Occasionally a note of warning was spoken, but no one paid the slightest attention, as was quite natural in the presence of the quantity of

in his door last summer, I could see leading down the bluff to the water on either side of the river, the deep trails made by the buffalo long years ago. They are grass-grown now with a vegetation that is brighter and greener than that of the bluffs and the prairie through which they wind, but they have not filled up, and of all the memorials these trails, the graven lines recording the passing of the buffalo, will remain the most lasting and the most impressive.

"BOB WHITE"

THE STORY OF A QUAIL

By Charles H. Morton

THE nest, with its precious contents of sixteen little eggs, occupied a snug corner of the old rail fence, hidden amongst the tall rank grass from the sharp eye of marauding crow or pirate hawk. Mr. and Mrs. Bob White were very proud of their treasures, and Mr. Bob would perch on the old, rotting post in the evening, and send his voice ringing across the cornfield answering the tremulous calls from pasture and wood, where other families of quail had their homes, and were letting the whole world know of their happiness.

Bob had experienced a hard time the winter before, and the peace and quiet of the spring, with the soft rains and warm sunshine seemed to him more a dream than a reality.

His faith in human-kind had been severely shaken that winter. He no longer felt safe as he sat by the roadside watching the teams rattle past in clouds of dust, and if they stopped near him he would vanish quietly, after the manner of all quail.

He remembered his fright once on a time when the farmer boy halted the horses, and fired a target rifle at him. The small bullet knocked him over and hurt sadly, but he scuttled into the long grass to safety, with a stinging graze across his back. This rough experience taught him valuable caution, and after several narrow escapes from death in the autumn, he was convinced that guns and dogs were things to be feared and avoided.

He and his little brown wife were the sole survivors of a large family of twenty quail, who, a year ago, had broken from their imprisoning shells, not more than forty steps from where his little partner was now watching over her treasures.

What a happy six months they enjoyed, through the spring's cool rains, and the summer's shimmering heat. But alas, when autumn came all was changed. Their Eden no longer was a place of refuge. Their lives were threatened every day, and only their strong little wings to save them. Even whirring flight through

the air could not always elude the shower of shot hurled after them from the guns.

Bob White never forgot that fatal day in mid-December when, making their way to the cornfield, the bevy sighted two hunters coming slowly along the dry ravine. They scurried for the timber as fast as their swift little legs would carry them. This was their habit when danger threatened, and such tactics had baffled the hunter many a time. Once within the tangled woods, they might bid defiance to gun and dog, for the kindly trees interfered with the aim, and the terrible cat-briars and heavy vines over all the ground troubled a dog sadly. This time it was no ordinary foe they had to deal with.

"John," called one of the hunters, "Dick has got scent of the bunch that fooled us so completely last week. Better take your dog and work along the edge of the timber and head them off, or they'll get into the woods again."

Thus it was that the bevy was panic-stricken to behold the form of a great red pointer swinging through the tall grass at a slashing pace in front of them, cutting off their retreat. As he passed onward, he suddenly caught the scent, and drew to a point, while the quail huddled together in indecision.

The dog not advancing, they slowly recovered from their alarm, and began to plan for escape. The two old birds, as usual, would lead the way to the woods, while the others were to scatter in all directions, meeting in the timber again when all was safe.

The plan was full of cunning, and might have saved them, but at this critical moment, a dark, moist nose was cautiously pushed through the grass, and the beautiful brown eyes of an Irish setter were fastened upon the startled bevy, between them and safety, and another voice said, "I was sure they would fly before you got here, Charlie; old Bob was getting impatient at the delay, and was aching to flush them, and I was afraid they would all get into the woods. Look at Dick; isn't he a picture?"

It was a scene, indeed, worthy of an artist's brush. A bright December sun, lighting the sumac-bushes and deepening the brilliant foliage of the forest background. Two forms, roughly dressed, whose hunting-coat pockets bulged with loaded shells, their shining guns held at ready poise, standing knee-deep in the dead grass on the gentle slope of the upland. Their hearts beat a trifle faster, perhaps, as they speculated upon the mystery which the grass just before them concealed; a mystery to them unread, but easily interpreted by the sensitive nostrils so eagerly and patiently outstretched.

The two dogs stood facing each other. "Bob," the pointer, rigid as iron, with up-lifted head and forepaw. The setter, with his noble head extended and jaws gently moving as if drinking in the scent that had transformed him into a statue, his feathery tail level with his back, and one fringed forefoot raised from the ground.

The crisis which calls upon the hunter's command of will and nerve was at hand; that moment which sends the blood thrilling through the veins, when he says to himself over again, "I shall not miss"; when hand and eye and brain act together in the lightning-flash of an instant, and drifting feathers answer the sharp detonation of powder.

It is the tragedy of Nature, for which, let us hope, there is the pardoning virtue of a great excuse.

The two old birds suddenly left the grass at this moment, with a buzz of strong wings, but not wishing to fly over the dog, they circled in order to make the woods. They passed John like twin meteors, and two sharp reports smote upon the stillness of the afternoon with ominous import.

"Good kills, both, but you shot the first one rather close, old boy."

"Had to shoot quick, or they'd been safe in the timber. These loads are all right."

"Are you all ready?"

"Yes; go ahead."

Two forms moved in between the motionless dogs, and the bewildered bevy arose with frightened clamor, going straight away to the prairie-grass along the little slough. Three fell to the discharge of four barrels.

These were retrieved by Dick, the setter, as also were the first victims of John's

double shot. He brought them tenderly to his master, a world of love in his eager eyes, and Charlie handed them to John with a good-natured joke at the expense of the pointer, who would not retrieve.

Bob White dimly remembers what followed. The routing-out by the dogs; the sharp and frequent reports of the guns; the tramping hither and thither, until finally he, himself, was an object of interest to the panting dogs, and a voice said, "Your turn, Charlie; don't miss."

As he struggled out of the grass, one of the unfortunate bevy flushed beside him. She had lain so still that he had not noticed her. Wild with fright they hovered above the tall grass a moment, before speeding away to cover, but no report of gun or sting of shot interrupted their headlong flight.

"Why didn't you shoot? Was your gun empty?" said John. "The easiest shot you have had to-day; that's a good one on you."

"How many have you got, John?"

"Ten, and I am two ahead of you, old man."

"Well, there can't be but two or three left, and we may want to have some sport here next autumn. We have got enough for to-day, and my conscience hurts me for killing so many from one flock. Besides, the sun is getting low, and we should be working toward home."

Bob White and his little companion joined another bevy that afternoon, and escaped the dangers of the shooting-season, and survived the hardships of the winter that followed.

Theirs was the nest Bob so jealously guarded under the old rail fence, and so peaceful had their life been all the spring, that the old terrors were lulled to rest. Bob was sure that at least fourteen of the eggs would turn into little, active, fuzzy brown chicks who could run and shift for themselves almost as soon as hatched.

In a few days there were scattered around their door-yard the broken shells of sixteen eggs, and the busy brown little forms that had lately occupied them were following two of the happiest quail in the world.

Now Bob's fear of mankind was forgotten, for the time, and he would mount the top rail at eventide and pipe his song until the first firefly's lantern glinted among the dark tree-trunks in the whis-

pering woods, while the swallows and bats dipped and circled around him, and the young rabbits nibbled at the grass by the roadside. Hawk nor weasel had found his nest, and dog and gun had never interrupted his happy life. Summer came and went, and September was at hand.

September is the prophet of autumn, and comes foretelling the passing of the year; spreading her panorama of dry, bare prairies, denuded cornfields, and stretches of stubble where once was the growing grain; strewing the faint woodland paths with falling leaves, loosened not by frost, but by dry weather; and dropping walnuts, wrapped in their thick green husks, on the grassy walks for the squirrels to bury. The birds have changed their coats and their songs, and even their habits. Nature, herself, seems to be resting for the last grand carnival of the year, in which she appears in her handsomest of robes.

Bob White has changed his musical call, and has taught supreme caution to his family diligently, for the past four weeks. He knows from sad, hard experience, that with the falling of the leaves from hedge and tree, begins a reign of fear and death among his tribe. He forsakes the open path by the roadway, and haunts the hedge-rows and the woods along the edge of the upland.

Our Bob has not recovered from the shock of a few weeks ago, when his own beloved family, while busily catching grasshoppers in the old wheat stubble, were caught themselves by the brown eye of a large Irish setter, whose sensitive nose had located them long before they were aware of his presence.

Away flew the anxious little mother, to fall and flutter helplessly before the dog, whose master was quietly enjoying the little comedy. The young quail had meanwhile scattered in all directions, fluttering over the stubble, or running to crouch and remain motionless, even if trod upon.

The hen, still calling her alarm-note, tossed and tumbled before the setter in exact imitation of a broken-winged bird, until, assured of the safety of her brood, away she whizzed, to the evident astonishment of the well-trained dog, and the hearty amusement of his master.

"Good dog," said he. "I was afraid you would break your stand, old fellow,

but you haven't forgotten all you ever knew, have you, Dick?"

The noble animal, seeming to understand that this was but an idle excursion, answered with an intelligent look in which love and mischief were blended. He drew to another point, stopped short, then carefully pushed a small quail from under the grass and leaves with his nose, and watched it flutter with all the strength of its feeble wings to a bunch of grass ten feet away.

"Come on, Dick; let's not pester these little fellows any more. Your nose is fine as silk, and I could have dropped the big bird inside of fifteen yards easily. Remember that fine covey you rounded up at the edge of the timber, over there, last autumn? We didn't do a thing to them, did we, old boy? Down, pup. Don't get so excited. Maybe these are some of their relatives, and we can have no end of sport this winter with them, if we have not frightened them to death already. Good shooting; that was. Come on, dog, and we will prospect over on the hill."

Had Bobby White understood all this talk, his alarm would have been the greater. This much did he understand; here were his old enemies already trespassing on his domain and preparing for his destruction in the autumn. Caution and strategy only would save him now, and he resolved to shun the open fields, and roadways, and never again go to the wheat stubble. At night he withdrew his family to the high rank grass of the ravine, and when the dew was cold and sparkling on the blades in the early morn, they stole by secret ways down the tall corn-rows, listening for the slightest noise, and ready to take wing and away at the first suspicion of alarm.

His voice was seldom heard during these trying times except as a signal-note to scattered members of the bevy, but in the early morning, when the harsh voice of the mallard could be heard on pond and creek, mingling with the peevish cry of the killdeer, a clear, mellow call would ring from the cornfield, to be answered from the distant wood; and then, as the great, golden sun ushered in another glorious Indian-summer day, and mallard and teal had left for their southern home, Bob White became silent, and sought the shelter of the dark, dense trees and the tumbled vines.

His only fear was that the red setter, Dick, would find him. He felt it was only a question of days until this fear would be realized, and his brown darlings be made targets for the owner of this four-footed Nemesis.

Bob cared nothing for the casual gunner and his wild, half-trained dog. He well knew the propensities of this animal, and often led him a merry dance up and down the rows of corn, keeping out of range of the breathless hunter, who vainly tried, in his turn, to keep within range of his dog. Up and down the field the eager animal would chase, and then, when the sportsman's patience became exhausted, Bob, easily evading his plunge, and taking wing, sailed down the slope to the ravine and the high grass, and was lost forever as far as this particular dog was concerned. The hunter would then bring his headstrong brute to hunt up the scattered birds, and treat the interested bevy to the scandalizing spectacle presented by a panting, tired dog rushing straight into the pool where he would lie, shoulder deep, lapping the cool water, breathing long sighs of satisfaction and ignoring the expostulations of his angry master.

When the dripping dog clambered from the mud and shook the water from his coat, and endeavored to follow through the thick, dusty grass the bewildering trail, he would find it end, after twisting and doubling a dozen times, among the briars and vines in the heavy undergrowth, where both hunter and dog would leave it, discouraged and fatigued.

Colder weather; mornings bathed in the soft pearly haze of the beautiful Indian-summer. Frosty nights, when the chill stars sparkle sharp and clear as diamonds, and the shrill whistle of the wild duck's wing thrills upon the air. Balmy days, when grove and forest flame with brilliant coloring against the blue background of the October sky, and the nervous little squirrel scolds and fumes as he works with the falling nuts. The birds are well started to the warm South, but the flash of blue among the tree-tops betrays the jay, even before his strident voice denotes his presence. The creepers are still busy upon the rotten limbs. In the stark fields the voice of the mourning dove sounds the requiem of the fading

year, and the swift rush of the shrike as he catches up the unwary mouse, does not escape the sharp eye of his larger brother, the red hawk, hanging motionless against the clouds.

Now and again hill and valley echoed with the reports of breech-loaders, and hunters, with their dogs, ranged to and fro through the tall dead grass, searching for scattered coveys. But for Bob White's careful training, his family would have suffered time and again. Their tactics were a puzzle to the dog, who but found their trail to lose it. Only the setter, Dick, held the key to his movements, and Bob dreaded the time when this silken-coated fellow should unravel the many turns and twistings of the bevy.

Hark! A step crushing the long dry grass. A canvas-coated figure with ready gun is dangerously close. As the sun glints on the barrel the suspicious crows take wing from the cottonwood with harsh notes of alarm. The light sound of a bird-dog's feet comes nearer and nearer. Then silence.

The quail rise from their cover and speed on startled wing through the mild autumn air. A sharp report breaks the stillness. A crash, a pang—and darkness. Another report. Soft feathers drift back on the cool wind and catch, fluttering, on the dry twigs, mute signals of woe, telling the hunter that his aim has been deadly.

A graceful Irish setter retrieves two warm, still, brown birds, stricken down in their lusty vigor. The afternoon's languor is startled by the frequent report of the shotgun. Now there is silence, unbroken save by the cry of a distant hawk, or the rustle of the wind as it stirs the grassy billows. The crows came warily back to the dead limbs in the old cottonwood and rejoice in the calm that has again fallen over their domain. The wigwags of the cornfield bask in the warm sunshine, and within them, the mice are gathering their winter store of golden grain. The sky is blue as steel, and against its azure is seen a far-away wedge of cranes flying on unwearied wing to their southern refuge, and the melancholy music of their voices comes faintly to the ear. A whistle, melodious but sad, calling "Bob White," thrills through the air, but Bob White does not respond. His little history is finished.

MODERN GOLF CLUBS AND MODERN METHODS

By Horace Hutchinson

THE golfer is essentially a hero-worshipper; and not only is he a hero-worshipper, but he has faith in the methods of heroes, a faith that is touching. He has at the same time a sublime confidence, although hitherto latent, in his own abilities for heroic achievement;

he has not a doubt that, adopting the methods of heroes, he will join the demi-gods on Olympian heights. Which means, to put it into the language suited to the comprehension of the golfer, that every golfer has an inextinguishable faith that if he has his clubs made on the pattern of Harry Vardon, and can get just his crook of the elbow and overlapping grip, he will be just as fine a player.

Why should he

not? Anatomically there is not much difference between himself and a champion; hitting the ball is an affair of hand and eye; both he and the champion have the same number of hands and eyes; why should not one hit it as well as another? Why not—provided both use similar weapons?

The result of this faith—which is universal, even if not universally admitted—is that so soon as a man plays himself into the happy position of champion, or of eminence at all famous, he becomes at once, to a host of pious followers, an occasion of that most sincere form of flattery which expresses itself in imitation.

There is a residuum, of course, of the stiff-necked fellows that follow their own counsels, unaffected though champions come and champions go. They stick to their old fashions.

Generally they are of the unamiable generation that quarrel about the rules of golf, for they not only stick to their opinion, which is right and proper, but also believe it to be of value and expect others to adopt it, which is absurd.

Leaving them, let us consider the case of the more amiable, the pliant, the believers. We find in each generation that the great man was able to stamp with his own individuality the golf club of his time. Thus Allan Robertson, when courses were exceedingly narrow, so that the "sure" was of more value in comparison with the "far" than it is now, played with light, easily-wielded clubs, and played gently and swung quietly, with them. He set the mode of his generation.

There followed him young Tommy Morris. He was a slasher; by temperament not "douse" nor canny, after Allan Robertson's pattern, but a bold spirit, trying for long flights, long carries. He made the golf club of the general more formidable, perhaps more supple, somewhat heavier, and he hit parlous hard with it.

The St. Andrews' green was beginning to widen out a little in his day. His bold methods justified themselves, as used by him. Some of his followers they brought to perdition. Young Tommy died in his zenith, and this means that his influence



H. Vardon,
Open Champion, U. S. A.



J. H. Taylor,
Open Champion,
Great Britain.

held its power longer than it would have done had his force been seen to wane or be menaced by the power of a rising rival.

Between the day of young Tommy and the day of the late Mr. F. G. Tait, no other influence at St. Andrews was so great as young Tommy's memory; and in most of that interval St. Andrews was setting the tune to all the golfing world.

The first man to do mighty things with clubs markedly different from those used by young Tommy was Harry Vardon. Harry Vardon won his first championship with clubs a good deal lighter and a good deal shorter than the commonly—though tacitly—recognized standard.

The modern golfer was as pious in imitation as the golfer of the Morris period. At once the world began with one accord to lighten and shorten its clubs, nor did it seem to shorten its drives in doing so.

For a long while Andrew Kirkaldy, the sort of sturdy person who holds to his own opinion, denied that Vardon's reputation was fully earned, but about that time he uttered the remarkable dictum that "the lighter the club the longer the drive."

Such a statement as that has at least the merit of bringing the question into a form in which it can be criticized. It puts the issues plainly. Now, as it is stated, it is not too much to say of this axiom that it is stark nonsense and the precise opposite to the truth. To the meanest capacity it is apparent, even if he cannot put the obvious fact into a form that explains it, that, other things being equal, the heavier the club the longer will be the drive. That is truth. But it is also truth that other things are not always equal.

Presuming (a big presumption, perhaps), that your club head is going in the right direction when it meets the ball, the strength of the blow that it deals the ball is determined by the momentum of the striking body—that is to say, by the weight multiplied by the velocity.

To get the greatest possible momentum is the problem. If the weight of the club be increased to that of an iron crowbar the velocity with which the ordinary human hands can move it is so reduced that the result of multiplying the great weight by the tiny pace comes out at much less than the result of the multiplication of the pace and weight of a normal club, and similarly the momentum that human hands can give a walking cane is nothing

like what they can give the normal club, because, although the pace is so great at which it can be moved, the weight, by which the pace has to be multiplied, is quite inconsiderable.

So it is pretty clear that virtue lies in an Aristotelian mean; the best results will be

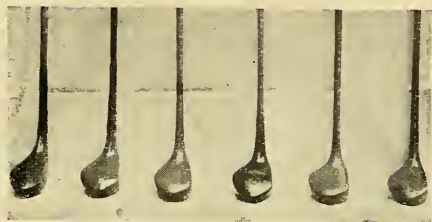


The Late Mr. F. G. Tate,
And the Amateur Championship Cup of Great Britain.

gained from the club with which a man can get the greatest momentum; it must not sacrifice so much to weight that he can get no pace into it, nor so much to pace as to have no weight.

The clubs with which Vardon won the championship were light, they were short, but they had a good deal of spring. The effect of this was that many copied them, in the hope of imitating his results, to what end they only know. Mr. Tait, great player that he was, held out against the fashion; his clubs were always long and heavy, and he used them with singular control, as it seemed, always appearing to play well within himself, as we say, and to have a fund of force in reserve.

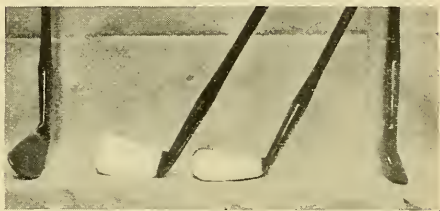
Our latest English champion is Taylor; and Taylor won his last championship in extraordinary scores, with certainly the most marvelous weapons with which man has brought miracles to pass since the days when Samson wielded the



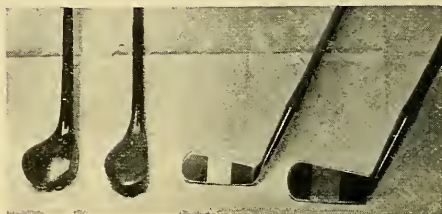
1, Straight-Faced Driver; 2, Bulger Driver; 3, Fork-Spliced Driver; 4, Socket Driver; 5, Single-Piece Driver; 6, Vardon Driver. Nos. 1, 2 and 6 are Scared Clubs.



1, Cleek; 2, Jigger or Lofting Cleek; 3, Vardon Mid-Iron; 4, Ordinary Mid-Iron; 5, Park Goose-Neck Putter.



1, Centra-ject Mashie; 2, Taylor Mashie; 3, Ordinary Approaching Mashie; 4, Concave Mashie.



1, Bulger Driver; 2, Straight-Faced Driver; 3, Ordinary Putting Cleek; 4, Deep-Faced Putter.



1, Brassy Niblick, End View; 2, Brassy Niblick, Side View.



1, Modern Spoon; 2, Brassy Niblick; 3, Bulger Driver.

donkey's jawbone. They are short, shorter than Vardon's, they are light, lighter than Vardon's, and their shafts are as stiff as pokers. How it is possible for man to get the length of ball that Taylor drives with them must ever remain a mystery. Taylor himself asserts that if there be any spring in the shaft of the club it is impossible to use the wrists properly in the stroke, impossible to time the use of the wrists properly.

Vardon, since winning his first championship, has rather increased the weight



1, Brassy; 2, Modern Spoon.

of his clubs, so that his length of drive puzzles us less than it used to do; but Taylor's clubs, light, short and perfectly stiff, feel as if they might do for putters, but as drivers are impossible. His latest championship play is too recent for us to see the effect of those weapons on the general style of driving clubs, but there it little doubt that not a few will copy them.

For a man of Taylor's sturdy build, strength of wrist and shortness of swing, it is likely enough that they may be the ideal things; but the or-

inary mortal will probably want a club that will do more of the work by itself. Taylor's ball has not quite the length of carry of Vardon's, but it has a better run, and when they play together the two are seldom far apart after the tee-shot.

For the rest the new and rising school does not seem to have any very novel ideas about its clubs. Mr. Hilton, the British amateur champion, plays with clubs of quite the ordinary measure. Mr. Maxwell, the young player who perhaps has shown finest form of the new school, plays with a driver that seems but a small thing in the hands of a man of his physique, and Mr. Bramston, a very long hitter, uses a very modest and short club.

On the whole, the weaver's beam is not in vogue, and when people begin to know more widely the little clubs with which Taylor plays so well, the normal size and weight of the club probably will be further reduced. That, however, is matter of prophecy—a hazardous departure from the safe and narrow course of fact.

Taylor's great strength is in his approach play. His methods he has explained in full detail in "*The Book of Golf and Golfers.*" Copies of his own mashie have had a large sale.

Park, who is undoubtedly a very fine putter, has adopted a style of iron putter with a neck so bent that the blade lies behind the line of the shaft. The merit of this is that the weight lies in front of the blade, and thus helps the blade to go



Mr. R. Maxwell Driving.

straight through, when the ball is struck—an obvious merit.

The merit of Taylor's mashie is not as particular as this, the club being merely a very well balanced, ordinary mashie with a sufficiently large blade and sufficient but not excessive loft. Both these points are important in a mashie. Sufficient loft is necessary in order to get loft and a fairly dead pitch on the ball, but excessive loft, though once in a while it may pitch the ball marvelously dead, calls for great accuracy in striking the ball exactly on the right spot of the blade; and further, it is not possible to get the length of shot, that is sometimes useful, from a club greatly lofted.

For a like reason it is well to have sufficient breadth of blade. If the blade be too small and niblick-like the difficulty of accurate hitting is increased. Sayers, the noted North Berwick professional, put this pointedly and well when he said: "You do not need to be so careful with them"—with the big bladed as with the small bladed mashie, he meant; there is not the same chance of that hitting of the ball on the socket which the Fairlie clubs were specially devised to obviate.

The golfer is not a very rational animal. If he would only consider that his aim should be to find out the weapons that will make the game most easy for him he would modify them a good deal; but very



J. H. Taylor, Putting.



From "The Book of Golf and Golfers,"
by Courtesy of Longmans, Green & Co.

Set of Old Clubs.

a great exponent of the "baffy" spoon—that is to say, a short-shafted wooden club, with a face much laid back. It performed the functions that the modern gets out of his cleek or his driving iron, throwing the ball high and letting it fall pretty dead. It could be played with a full or a half swing.

Just now I find a great many, especially of the English players, using what is practically the same club, under the name of a Toby. Probably they regard it as a new invention. It does not require the skill or the force to play the Toby well that is required for the accurate and strong play with the cleek and iron. They are clubs particularly suited for women at golf.

Women seldom have the strength required for really first-class iron play. On the whole, one is rather disposed to commend the use of the Toby or the baffy spoon to the large class that find a difficulty in playing the irons and driving mashies, but it has the highest sanction, Mr. Hilton, the amateur champion, affecting half-shots with the brassy.

few have the grasp of first principles that is required to make them face the problems of the game in this fashion.

Our good friend to whom so many a weary legend attaches, Allan Robertson, was

The weak point about these wooden substitutes for the more generally recognized irons, is that they fail when the lie is bad. They do not help in cutting the ball out of evil places, as the iron blade will cut it out.

On the other hand, there is this to say, that they are not nearly as severe on the good turf of the links, taking one stroke with another. The iron, cutting out a solid big divot, does now and again less harm than the wooden club which just scruffs away the top of the turf, for the simple reason that if the solid turf be replaced there is a fair chance of its growing again, unless the soil be very dry indeed, whereas there is nothing to replace at all after the scruffy stroke with the wooden spoon.

Taking the rough with the smooth, there is no doubt that the wood is less severe on the turf than is the iron.

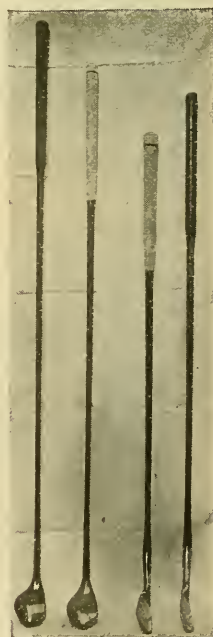
I have referred to the



From "The Book of Golf and Golfers,"
by Courtesy of Longmans, Green & Co.

Set of Hugh Philip Clubs.

bent-necked putter. Lately I have seen a putter that seems a very good one—one that might best be described as a wooden putter made of aluminium. The meaning of this is, of course, that the head is made in the shape of the head of a wooden putter, but



1, Ordinary Driver: 2, Vardon Driver 3, Taylor Mashie 4, Ordinary Mashie.



Mr. John Ball, Jr., at Rushes Hole.

that the material used for it is aluminium.

It has not been hidden from the insight of the observant golfer that the wooden putter is a better tool for running the ball up over rough ground, and for playing the longer approach putts, than the iron putter. The latter seems to keep the ball running closer to the ground, so that it is more liable to kicks and unkindly treatment from inequalities of the ground. The iron putter appears to better advantage for the short putts on the smooth greens. Moreover, the wooden putter has this disadvantage, that with the weight massed as it is more or less at one spot behind the point of impact, the difference of the run given to the ball by hitting it on this exactly right point of impact from the run given by a stroke deviating from the correct point of impact ever so little is very great, far greater than in the case of the iron putter, which is homogeneous all over its head: a quality of great moment.

The same is the case with the aluminium-headed putter, which has no lead in it, with no massing of the weight at any one point. It is homogeneous. And while it keeps this merit of the ordinary metal-headed putter, it has also the merit of its wooden model, in that it sends the ball running over rough ground with the same freedom as the wood itself.

Of new inventions likely to become popular in the immediate future, this aluminium-headed putter takes the first prize, according to the humble judgment of the present scribe.

India-rubber grips to clubs are fairly popular; but they do not serve you well in wet weather, becoming as slippery as eels. Aluminium cases, with rubber or wood filling and facing, for driving clubs, are adopted by a few, but any deviation from the exactly right point of impact has more effect on the ball when they are used than with the ordinary clubs. The black vulcanized fiber, sometimes used instead of horn, is certainly an improvement on that brittle substance, and a couple of screws, to fasten it, better than the wooden pegs. Therewith we have fairly exhausted this brief account of many inventions.

For the photographs of the late Mr. F. G. Tait and of Mr. John Ball, Jr., I am indebted to the kindness of Mr. Walter Stone. For those of Mr. Maxwell and Harry Vardon, to Mr. W. H. Fowler.



Vardon Making Iron Shot for a 140-Yard Hole.

BREEDING THOROUGHBRED PONIES

By Theodore Cuyler Patterson

THAT there is a large field for the breeding of ponies of the abler kinds, there can be no doubt. The developments in the South African war, as well as in the Philippines and in China, conclusively show that the small horse has become a most important factor in modern war for the use of light cavalry and mounted infantry, the sort of animal required being a stout, active, well-bred cob from 14 to 14.3 hands in height.

Both the English and German governments are seeking such animals in large numbers, and they will readily buy all that can be furnished; and no less an authority than Sir Walter Gilbey—one of the best known of English breeders—has lately published a well-considered book, entitled "*Small Horses in Warfare*," which emphasizes the position and points out the path in breeding which, it is thought, will lead to the best results.

Sir Walter Gilbey's conclusions are that:

"The peculiar suitability of horses from 14 to 14.3 hands for mounted infantry and light cavalry is acknowledged, and these will in future form a larger part of our Army. It behooves us to turn to breeding and what is required is an animal between 14 and 14.3 hands, stout and able to carry weight for long distances at fair speed, strong of constitution and the more tractable the better. To get small horses endowed with these qualifications we must look to the breeds which possess them in marked degree—the ponies of the Welsh hills, New Forest and West of Ireland (Connemara), ranging from 12.2 to 14 hands; compact, sturdy, untiring, they can carry weight out of all ratio to their size. Keeping in mind that an animal of the polo pony stamp—a hunter in miniature—is required, what sire is more likely to get the desired pony than the Arab? We might use a small thoroughbred, but having regard to the rarity with which we find good bone and sound constitution in the thoroughbred, and also having regard to the inherent soundness and stoutness of the Eastern horse, we shall probably obtain more satisfactory young stock if we use the Arab sire. Blood gives the superior speed and courage required in the polo

pony, and let us not forget that Arabs were the sires from which all our modern race horses are descended. By going back to the original strain we shall obtain all the useful qualities which our thoroughbreds possess without their undesired characteristics; in a word, we shall obtain a natural, not an artificial horse. By using the Arab we may expect to obtain the qualities which our race horses boasted a century ago. By crossing the Arab on our pony mares we shall obtain the increased size and speed required while it will preserve the valuable qualities of the dams."

Nor is this military need for the small horse its only use, since it is alike available on the polo field and in the park and even for hunting and racing also. The question, then, is how can this desirable animal best be bred here in America, and to what blood sources shall we turn to evolve and confirm the breed in a fixed type—that is, a pure type which will with certainty reproduce itself and so fairly be entitled to be known as thoroughbred?

Apart from the effort to produce the Shetland, which will not be here considered, but little has been done in pony breeding in America. Outside of Texas, New Mexico, Colorado and possibly Montana and Wyoming, no plan has been pursued with the purpose to produce ponies, as such; and it is very doubtful if breeders in those sections have had any object other than to get what they suppose can be profitably sold, without regard to the evolution of any type or the use to which the product may be put.

The cross of the deficient thoroughbred upon the broncho is hybrid breeding, which is not to be commended, for when, to the wild, vicious nature of the broncho, the hot blood of the race horse be superadded the result is but to intensify the bad qualities of both, while you conserve the good points of neither. The broncho, like his old-time associate, the Indian of the plains, may be good after he is dead; he has served his turn as a makeshift in polo, but as our players improve at the game, they look for better mounts and so they have tried the thoroughbred artificially stunted in the rarely successful ef-

fort to bring him within the standard size.

The broncho with some thoroughbred blood may be usable in polo—although too often over-size—but his want of sense and almost untamable nature would unfit him for military service and general use, and that he can be safely founded upon with any cross, thoroughbred or otherwise, is a matter of the gravest doubt, particularly if he be taken out of the environments which have surrounded him for twenty or more generations, by which his nervous energy and force will be greatly lessened and his hardy nature lost.

At all events, if the object in breeding be to create an enduring type, better and surer foundation material exists in the ponies of Ireland (Connemara), of Wales and of Russia—the latter of Orloff descent—and all steeped in Arab blood, the fountain source whence the pure

stream flows and upon which the more lasting structure can be built. There are no short-cuts in good breeding and blind

paths are apt to end in disaster. As Sir Walter Gilbey very wisely says, a resort to first principles by the use of the Arab with typical pony mares is the only safe course.

But in this country it seems that any kind of horse of less than normal height has been thought good enough to be called

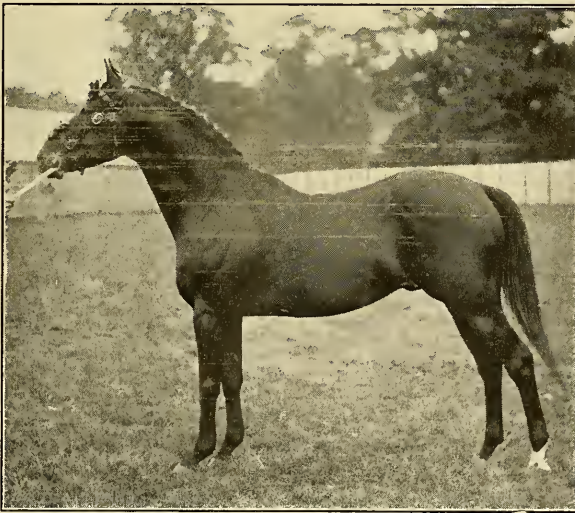
a pony, if only he can be crouched below the standard, and such nondescripts have

been suffered to contest in pony breeding classes at our horse shows and have been awarded premiums without question as to their breeding, the only requirement exacted being an apparent power to go high in front without regard to natural hock action, freedom of movement or proper conformation. So that

it may be said that small encouragement is given in public exhibitions here to pony breeding and, although our horse shows



Kasim,
Americo-Arab Pony Stallion, Erdenheim Farm.



Rosewater,
Sir Walter Gilbey's Thoroughbred Pony Stallion.



Mavourneen,
Connemara Mare.

were chartered with the object and for the expressed purpose of specially encouraging breeding, it has each year been made more and more plain that these functions are less helpful to the honest breeder and exhibitor than they are to the dealer, or mere horse speculator, who shows his flash animals in the hope of catching a buyer. Fault has been also found with the decisions rendered, particularly in breeding classes, by those who act as judges, yet it may be that these unlucky persons have tried to do their best; but of some of these, it may be said as was written of the man who painted the portrait of "Dorothy Q"—that he was "one whose best was not over well."

That reform is needed in our horse shows few will doubt; the fake exhibitor and incompetent judge should be relegated to a show of their own, and fair play for all should be made the cardinal feature, in practice as it is in theory, at every exhibition, whereat only those of admitted competence and character should be suffered to act as judges, and they should be held accountable alike to the exhibitor and the management at every show. Prize lists should be more carefully edited and breeding classes more intelligently worded, and the stringent rules as to disqualifying "all horses doctored or in any way unfairly prepared"—always printed in the prize list—should be enforced; and yet that the cruel practice of "cording" and

other means used by artistic knavery to force action, are prevalent at horse shows, is apparent to all, excepting the judges, who have in this regard one of the chiefest attributes of justice—blindness.

The present system of veterinary examination in the ring should be changed and such examination should be completed before the exhibits come before the judges. Classes for brood mares "certified in foal" should be abolished, as affording too large an opportunity for misrepresentation, if not for actual fraud, and classes for brood mares "with foal at foot," substituted, so that only producing mares can be exhibited, and stallions, in breeding classes, should in general be shown only "with their get" to enable intelligent judgment as to the worth of the sire as such, to be reached.

These and possibly other rules should be formulated and enforced if horse show directorates intend to encourage breeding. No doubt those who unselfishly devote so much of their time to the management of our shows wish to procure only the best results for the exhibitors and the public whose generous patronage supports such exhibitions; and so it may be that the suggestion of an existing mischief will bring about the speedy application of the appropriate remedy.

In Great Britain, the breeding of the



Ben Asrek,
Lord Arthur Cecil's Arab Stallion.

abler kinds of ponies has, especially since 1893, been prosecuted with the view of producing a definite general type. Before then in Wales and in the New Forest ponies ran wild in herds, as indeed they do yet, their propagation being for the most part left to natural selection.

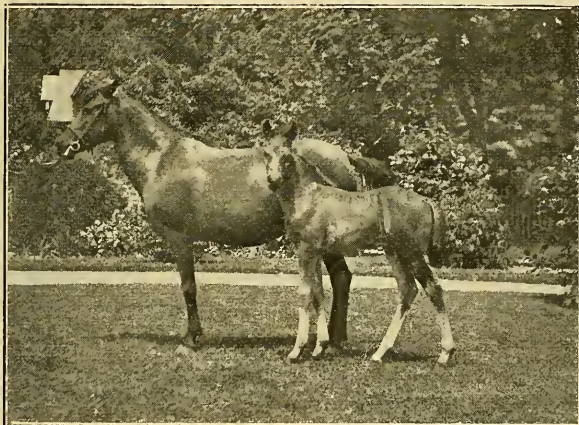
In 1893, in view of the largely increased interest in ponies, a number of gentlemen, including the Earl of Harrington, Lord Arthur Cecil, Captain Moray Brown, the Rev. F. F. Vidal, Mr. John Hill and others, formed a society "for the improvement and encouragement of the breeding of high class Riding Ponies," founded a stud book for the registration of pedigrees, called it *"The Polo Pony Stud Book"* and prescribed that "the limit for the height of foundation mares and stallions shall be 14.2 hands," the object of the Society being "to promote the riding pony" in general, and not only the pony usable in polo, it being recognized and accepted that a saddle pony must always be of the highest type.

This stud book is not for British bred ponies only; ponies bred in America are admitted to full registry when, upon due inspection, they are found to be of the right stamp. Great advances have since been made, of course, but no exact general plan has as yet been formulated, each breeder being left to follow out his own theories, with the result that up to this time it cannot be said that the type has become fixed, although in general the several breeders are working out the problem, if not in the same way, at least upon parallel lines—as it were—so that at no distant day the paths now severally traversed by the different breeders, having in reality a common object, will converge and meet in a central point, when it will

no doubt be found that each has fairly contributed his just quota and so been instrumental in promoting the common cause. Something, however, remains to be done by each of these separate co-workers before this common ground shall be safely reached by all, after which the path will be plain and the going easy.

The good work of some of the English breeders deserves special notice. Prominent among these are the Lords Arthur and Lionel Cecil, who have their stud at Orchardmains, Kent (close by that most charming of old English show-places, Knowle), where is a collection of New Forest and other pony mares, which have been interbred with Arabs and thoroughbreds with most encouraging results, the object of these careful breedings being

to conserve the excellence of the native breeds and at the same time to refine and reinvigorate them with Arab blood so as to produce a pony of thoroughbred type which will either run or trot according as it may be developed, or, as Lord Arthur



Maritje, Welsh Pony Brood Mare, with Asil, foal by Kasim.

Cecil himself expressed his thought on the subject in writing of co-operation in breeding between England and America:

"The present racing machine of the turf (the thoroughbred) was produced from our native breeds and the Arab, and judicious mating ought to build up these breeds to a position from which we can obtain riding ponies of the very highest description. I want to graft back again on to the native ponies, whether Welsh, Exmoor, Dartmoor or New Forest, the qualities which have been greatly lost by the indiscriminate use of the so-called hackney. You in America have a very fine field for these operations, and I sincerely wish some means could be found whereby we could co-operate on both sides of the water."

The Welsh and New Forest ponies are famous for their surprising agility, and their power to gallop and turn quickly under weight makes them particularly valuable for foundation purposes in breeding ponies destined to be used on the polo field, or in warfare and indeed every saddle use. The Orchardmains stud has the Arab, Ben Asrek, a pony of substance and fine temper, while the small thoroughbred, Lord of the Lea, is a very well bred horse, so that as the result of such breedings a pony thoroughbred will be evolved which will be finer, faster and abler than its female antecedents, but which will nevertheless be controlled in pony blood.

At Tabley, in Cheshire, Mr. G. Norris Midwood, maintains his pony stud. Here are the Arab horses, The Bey, Hurlingham and Shy Boy (sons of Sir Walter Gilbey's Rosewater) and also a son of Saraband. The Bey is perhaps the better fitted to get the kind of pony most needed, but the fine quality of Shy Boy will always commend him even to the most critical as a pony of symmetry and high finish. Certain it is that the work now being done at Tabley will bear fruit and that to this breeder will be given the credit of having contributed most substantial aid in forwarding the common cause, and in promoting the object of pony breeding—the evolution of the thoroughbred pony.

At Creting Rectory in Suffolk, the Rev. F. F. Vidal, one of the best informed of Arab breeders, has been interbreeding Arabs with Exmoor mares for many years. Mr. Vidal, himself one of the founders of the Polo Pony Society, has done the best of work, not only in breeding, but in helping breeding interests. He inclines rather to the Exmoor than to some others, although he considers both the Connemara and Welsh breeds as among the very best for foundation use. Mr. Vidal in commending the Irish pony mares for breeding purposes, writes:

"The Connemara is the perfection of a pony, the reason being that it is all blood. Largely infused with Eastern blood (like the Welsh and the Exmoor) by Barb stallions and mares from the ships of the Spanish Armada, it was again reinfused with Arab blood in the early part of this century. But hackneys were sent into the district with deplorable results. No doubt there are still Connemaras untainted, but they are snapped up for polo at once. No man

who cares for a pony for saddle purposes, polo or otherwise, will ever look at an animal with hackney blood in his veins—it destroys all pace at the gallop and makes the canter lumbering and heavy. What we have to do as breeders is to secure the finest shoulders with great freedom and reaching power. A polo pony should be built on the lines of the miniature hunter, and yet be of more assured blood. He has to carry weight and stick to his work without flagging throughout the game, and he must carry his weight at the pace of a race horse for three hundred yards, jumping into his stride at once, and yet be so handy that he can be pulled up in twice his length and turn and be off without a moment's pause. These qualities are not to be had in any but clean bred animals. A hackney would be left ignominiously behind."

Pure Arabs, however, are scarce and cannot readily be found in England, especially since Mr. Vidal's and Miss Dillon's Arabs were scattered, excepting at Crabbet Park in Sussex, where Mr. W. Scawen Blunt's Arab stud is still maintained and where excellent specimens of the breed, some of which were brought from the East by Mr. Blunt and Lady Anne Blunt while others were bred at Crabbet, can be seen.

It may be in this connection mentioned that in America much attention has for years been given to the breeding of pure Arabs by Mr. Randolph Huntington, of Oyster Bay, N. Y., whose scientific work in intensifying his breedings is most interesting and whose successful efforts to preserve the Arab and Clay bloods in purity deserves the recognition at home which it has received in England and on the Continent. Mr. Huntington's object, however, being to breed only horses and not ponies, a consideration of his work has no place in this paper. Yet there are ponies, such as are now the object of the English breeders, bred in America, and it may be remarked in passing, that the experiment—begun at Erdenheim Farm, near Philadelphia—of interbreeding Welsh, Connemara and Russian pony mares with thoroughbred and Arab blood (under the skilful guidance of the veteran manager, John McCloskey) has been successful, and that the young stock, of which some are now nearly four years old, abundantly prove the correctness of the lines there pursued in breeding for foundation purposes and for type. These ponies have been accepted by the English

authorities as being of the proper stamp and they have therefore been admitted to registry in *The Polo Pony Stud Book*.

Small horses of probably almost pure Arab blood, ranging from 13.3 to 14.3 hands, exist in the Carpathian Range on the borders of Hungary; they are known as the Hutzulen or Hutcul breed, and they have power, speed and very high quality. Captain W. A. Kerr, V. C., an English officer of many years' service (author of "*The Stable Key*," the latest authority on matters equine and a book which should be in every horse owner's hands) writes of these small horses:

"The Hutzulen or Hutcul mares are good foundation stock. These mountaineer Easterns have been on the wild mountains for ages; they came from the East and are full of Arab blood, showing their origin in every point. They are active, untiring, and for their size can carry enormous weights. The Hutcul is the beau ideal and my selected pattern for mounted infantry use. Of late years the Austro-Hungarian Government has done much to preserve the breed. The winner in the famous and abominably cruel race from Vienna to Berlin was from one of these mares."

It must not be supposed, however, that every animal claimed to be an Arab, either in England or America, is really such, for both Assyrian and Gulf horses have found their way into both countries, from time to time, under the name of Arabs, and that such can be of use in breeding for military or other purposes is very doubtful, because of the uncertain blood in such sires, but the pure Arabs which have been brought to this country have proved their worth by their get and will have as enduring an influence upon American breeding as the Darley and Godolphin Arabians had in England, whence we derived horses of the richest Eastern ancestry in Diomed, Glencoe and Leamington.

While the English breeders have not as yet produced a fixed type of thoroughbred pony and are still feeling their way, the several paths which they are threading are surely converging to the common center in the thought that the best results will be obtained by the use of Arab and thoroughbred blood in the sires with pure pony blood in Welsh, Connemara, Exmoor or New Forest dams, because in these miniature horses the best individual traits are united and because in them

types have been fixed by natural selection and survival of the fittest through generations of progressive growth. Yet there are those among the English breeders who suggest that mares of half-thoroughbred blood should be used in the foundation cross, thus ignoring the pony breeds, but they forget that, to create and fix a pony type, pony blood must always predominate, and that wholly relying upon the thoroughbred cross will surely cause a too great increase in size. Nor is the matter helped by the use of undersized thoroughbreds whose stature has been accidentally or artificially reduced.

Some degree of racing blood is certainly useful, although the quantity has not been determined, but it is certain also that artificial or accidental undersize is no safe criterion. The thoroughbred, after two centuries of careful selection in breeding and stimulating, is confirmed in size and cannot be relied on to get ponies, while the pure Arab rarely exceeds 14.2 hands. Hence the best informed modern breeders consider the desideratum to be always Arab blood combined with a pure pony inheritance in the dams with a dash of stout racing blood to season the ingredients.

The stunted thoroughbred is moreover open to the objection that he is generally short of bone and almost always short of



Cupid,
Pure Welsh Pony.

temper, while the Arab is of the kindest disposition, so that it would seem that by fusing the Arab and thoroughbred with the purest pony blood we shall solve the problem, and then by judicious and careful inbreeding—not carried too far, having recourse only to such individuals as are of pure type and free from hereditary taint, and above all shunning the use of unsound or devitalized animals—to fix the type until it shall become *sui generis*, and so be able to reproduce with certainty.

This done, the end is not far to see, for in the compass of but a few years the

Anglo-Arab and the Amerigo-Arab, the Welsh and the Irish, with other pure pony breeds, will be so welded together that the type shall be surely fixed in the thoroughbred Anglo-American pony.

If, therefore, this new breed be built up, founded on the rock of pure pony blood, cemented by the race horse, and overtopped by the prepotent Arab, we will give to America and to the world, a small horse for the army, for home use and for export, which will place American breedings in the front rank and be of lasting benefit to our country.

WHERE THE TRAIL FORKS

A ROMANCE OF CAPE NOME

By Jack London

"Must I, then, must I, then, leave this town—
And you, my love, stay here?"—*Schwabian Folk-song.*

THE singer, clean-faced and cheery-eyed, bent over and added water to a pot of simmering beans, and then, rising, a stick of firewood in hand, drove back the circling dogs from the grub-box and cooking-gear. He was blue of eye, and his long hair was golden, and it was a pleasure to look upon his lusty freshness. A new moon was thrusting a dim horn above the white line of close-packed snow-capped pines which ringed the camp and segregated it from all the world. Overhead, so clear it was and cold, the stars danced with quick, pulsating movements. To the southeast an evanescent greenish glow heralded the opening revels of the aurora borealis. Two men, in the immediate foreground, lay upon the bearskin which was their bed. Between the skin and naked snow was a six-inch layer of pine boughs. The blankets were rolled back. For shelter, there was a fly at their backs—a sheet of canvas stretched between two trees and angling at forty-five degrees. This caught the radiating heat from the fire and flung it down upon the skin. Another man sat on a sled, drawn close to the blaze, mending moccasins. To the right, a heap of frozen gravel and a rude windlass denoted where they toiled each day in dis-

mal groping for the pay-streak. To the left, four pairs of snowshoes stood erect, showing the mode of travel which obtained when the stamped snow of the camp was left behind.

That Schwabian folk-song sounded strangely pathetic under the cold northern stars, and did not do the men good who lounged about the fire after the toil of the day. It put a dull ache into their hearts, and a yearning which was akin to belly-hunger, and sent their souls questing southward across the divides to the sun-lands.

"For the love of God, Sigmund, shut up!" expostulated one of the men. His hands were clenched painfully, but he hid them from sight in the folds of the bearskin upon which he lay.

"And what for, Dave Welse?" Sigmund demanded. "Why shall I not sing when the heart is glad?"

"Because you've got no call to, that's why. Look about you, man, and think of the grub we've been defiling our bodies with for the last twelve-month, and the way we've lived and worked like beasts!"

Thus abjured, Sigmund, the Golden-Haired, surveyed it all, and the frost-rimmed wolf-dogs and the vapor breaths of the men. "And why shall not the heart

be glad?" he laughed. "It is good; it is all good. As for the grub—" He doubled up his arm and caressed the swelling biceps. "And if we have lived and worked like beasts, have we not been paid like kings? Twenty dollars to the pan the streak is running, and we know it to be eight feet thick. It is another Klondike—and we know it—Jim Hawes there, by your elbow, knows it and complains not. And there's Hitchcock! He sews moccasins like an old woman, and waits against the time. Only you can't wait and work until the wash-up in the spring. Then we shall all be rich, rich as kings, only you cannot wait. You want to go back to the States. So do I, and I was born there, but I can wait, when each day the gold in the pan shows up yellow as butter in the churning. But you want your good time, and, like a child, you cry for it now. Bah! Why shall I not sing:

"In a year, in a year, when the grapes are
ripe,
I shall stay no more away.
Then if you still are true, my love,
It will be our wedding day.
In a year, in a year, when my time is past,
Then I'll live in your love for aye.
Then if you still are true, my love,
It will be our wedding day."

The dogs, bristling and growling, drew in closer to the firelight. There was a monotonous crunch-crunch of webbed shoes, and between each crunch the dragging forward of the heel of the shoe like the sound of sifting sugar. Sigmund broke off from his song to hurl oaths and firewood at the animals. Then the light was parted by a fur-clad figure, and an Indian girl slipped out of the webs, threw back the hood of her squirrel skin *parka*, and stood in their midst. Sigmund and the men on the bearskin greeted her as "Sipsu," with the customary "Hello," but Hitchcock made room on the sled that she might sit beside him.

"And how goes it, Sipsu?" he asked, talking, after her fashion, in broken English and bastard Chinook. "Is the hunger still mighty in the camp? and has the witch doctor yet found the cause wherefore game is scarce and no moose in the land?"

"Yes; even so. There is little game, and we prepare to eat the dogs. Also has the witch doctor found the cause of all

this evil, and to-morrow will he make sacrifice and cleanse the camp."

"And what does the sacrifice chance to be?—a new-born babe or some poor devil of a squaw, old and shaky, who is a care to the tribe and better out of the way?"

"It chanced not that wise; for the need was great, and he chose none other than the chief's daughter; none other than I, Sipsu."

"Hell!" The word rose slowly to Hitchcock's lips, and brimmed over full and deep, in a way which bespoke mingled wonder and consideration.

"Wherefore we stand by a forking of the trail, you and I," she went on calmly, "and I have come that we may look once more upon each other, and once more only."

She was born of primitive stock, and primitive had been her traditions and her days; so she regarded life stoically, and human sacrifice as part of the natural order. The powers which ruled the daylight and the dark, the flood and the frost, the bursting of the bud and the withering of the leaf, were angry and in need of propitiation. This they exacted in many ways—death in the bad water, through the treacherous ice-crust, by the grip of the grizzly, or a wasting sickness which fell upon a man in his own lodge till he coughed and the life of his lungs went out through his mouth and nostrils. Likewise did the powers receive sacrifice. It was all one. And the witch doctor, versed in the thoughts of the powers and chose unerringly. It was very natural. Death came by many ways, yet was it all one after all—a manifestation of the all-powerful and inscrutable.

But Hitchcock came of a later world breed. His traditions were less concrete and without reverence, and he said, "Not so, Sipsu. You are young, and yet in the full joy of life. The witch doctor is a fool, and his choice is evil. This thing shall not be."

She smiled and answered, "Life is not kind, and for many reasons. First, it made of us twain, the one white and the other red, which is bad. Then it crossed our trails, and now it parts them again; and we can do nothing. Once before, when the gods were angry, did your brothers come to the camp. They were three, big men, and white, and they said the thing shall not be. But they died, quickly, and the thing was."

Hitchcock nodded that he heard, half-turned, and lifted his voice. "Look here, you fellows! There's a lot of tomfoolery going on over to the camp, and they're getting ready to murder Sipsu. What d'ye say?"

Welse looked at Hawes, and Hawes looked back, but neither spoke. Sigmund dropped his head, and petted the shepherd dog between his knees. He had brought Shep in with him from the Outside, and thought a great deal of the animal. In fact, a certain girl, who was much in his thoughts, and whose picture in the little locket on his breast often inspired him to sing, had given him the dog and her blessing when they kissed good-bye and he started on his Northland quest.

"What d'ye say?" Hitchcock repeated.

"Mebbe it's not so serious," Hawes answered with deliberation. "Most likely it's only a girl's story."

"That isn't the point!" Hitchcock felt a hot flush of anger sweep over him at their evident reluctance. "The question is, if it is so, are we going to stand it? What are we going to do?"

"I don't see any call to interfere," spoke up Welse. "If it is so, it is so, and that's all there is about it. It's a way these people have of doing. It's their religion, and it's no concern of ours. Our concern is to get the dust and then get out of this God-forsaken land. 'Tisn't fit for naught else but beasts, and what are these black devils but beasts? Besides, it'd be damn poor policy."

"That's what I say," chimed in Hawes. "Here we are, four of us, three hundred miles from the Yukon or a white face. And what can we do against half-a-hundred Indians? If we quarrel with them, we have to vamose; if we fight, we are wiped out. Further, we've struck pay, and by God! I, for one, am going to stick by it!"

"Ditto here," supplemented Welse.

Hitchcock turned impatiently to Sigmund, who was softly singing:

"In a year, in a year, when the grapes are ripe,
I shall stay no more away."

"Well, it's this way, Hitchcock," he finally said, "I'm in the same boat with the rest. If threescore bucks have made up their mind to kill the girl, why, we can't help it. One rush, and we'd be

wiped off the landscape. And what good'd that be? They'd still have the girl. There's no use in going against the customs of a people except you're in force."

"But we are in force!" Hitchcock broke in. "Four whites are a match for a hundred times as many reds. And think of the girl!"

Sigmund stroked the dog meditatively. "But I do think of the girl. And her eyes are blue like summer skies and laughing like summer seas, and her hair is yellow, like mine, and braided in ropes the size of a big man's arms. She's waiting for me, out there, in a better land. And she's waited long, and now my pile's in sight I'm not going to throw it away."

"And shamed I would be to look into the girl's blue eyes and remember the black ones of the girl whose blood was on my hands," Hitchcock sneered; for he was born to honor and championship, and to do the thing for the thing's sake nor stop to weigh or measure.

Sigmund shook his head. "You can't make me mad, Hitchcock, nor do mad things because of your madness. It's a cold business proposition and a question of facts. I didn't come to this country for my health, and, further, it's impossible for us to raise a hand. If it is so, it is too bad for the girl, that's all. It's a way of her people, and it just happens we're on the spot this one time. They've done the same for a thousand-thousand years, and they're going to do it now, and they'll go on doing it for all time to come. Besides, they're not our kind. Nor's the girl. No, I take my stand with Welse and Hawes, and—"

But the dogs snarled and drew in, and he broke off, listening to the crunch-crunch of many snowshoes.

Indian after Indian stalked into the firelight, tall and grim, fur-clad and silent, their shadows dancing grotesquely on the snow. One, the witch doctor, spoke gutterally to Sipsu. His face was daubed with savage paint blotches, and over his shoulders was drawn a wolfskin, the gleaming teeth and cruel snout surmounting his head. No other word was spoken. The prospectors held the peace. Sipsu arose and slipped into her snowshoes.

"Good-bye, O my man," she said to Hitchcock.



"THE BUTT OF HITCHCOCK'S RIFLE DROVE HIM TO HIS KNEES, WHENCE HE TOPPLED OVER SIDWAYS."

But the man who had sat beside her on the sled gave no sign, nor lifted his head as they filed away into the white forest.

Unlike many men, his faculty of adaptation, while large, had never suggested the expediency of an alliance with the women of the Northland. His broad cosmopolitanism had never impelled toward covenanting in marriage with the daughters of the soil. If it had, his philosophy of life would not have stood between. But it simply had not. Sipsu? He had pleased in camp-fire chats with her, not as a man who knew himself to be man and she woman, but as a man might with a child, and as a man of his make certainly would if for no other reason than to vary the tedium of a bleak existence. That was all. But there was a certain chivalric thrill of warm blood in him, despite his Yankee ancestry and New England up-bringing, and he was so made that the commercial aspect of life often seemed meaningless and bore contradiction to his deeper impulses.

So he sat silent, with head bowed forward, an organic force, greater than himself, as great as his race, at work within him. Welse and Hawes looked askance at him from time to time, a faint but perceptible trepidation in their manner. Sigmund also felt this. Hitchcock was strong, and his strength had been impressed upon them in the course of many an event in their precarious mode of life. So they stood in a certain definite awe and curiosity as to what his conduct would be when he moved to action.

But his silence was long, and the fire nigh out, when Welse stretched his arms and yawned, and thought he'd go to bed. Then Hitchcock stood up his full height.

"May God damn your souls to the deepest hells, you chicken-hearted cowards! I'm done with you!" He said it calmly enough, but his strength spoke in every syllable, and every intonation was advertisement of intention. "Come on," he continued, "whack up, and in whatever way suits you best. I own a quarter-interest in the claims—our contracts show that. There're twenty-five or thirty ounces in the sack from the test pans. Fetch out the scales. We'll divide that now. And you, Sigmund, measure me my quarter-share of the grub and set it apart. Four of the dogs are mine, and I

want four more. I'll trade you my share in the camp outfit and mining-gear for the dogs. And I'll throw in my six or seven ounces and the spare 45—90 with the ammunition. What d'ye say?"

The three men drew apart and conferred. When they returned, Sigmund acted as spokesman. "We'll whack up fair with you, Hitchcock. In everything you'll get your quarter-share, neither more nor less; and you can take it or leave it. But we want the dogs as bad as you do, so you get four, and that's all. If you don't want to take your share of the outfit and gear, why, that's your lookout. If you want it, you can have it; if you don't, leave it."

"The letter of the law," Hitchcock sneered. "But go ahead. I'm willing. And hurry up. I can't get out of this camp and away from the vermin infesting it any too quick."

The division was effected without further comment. He lashed his meager belongings upon one of the sleds, rounded in his four dogs, and harnessed up. His portion of outfit and gear he did not touch, though he threw onto the sled half a dozen dog harnesses, and challenged them with his eyes to interfere. But they shrugged their shoulders and watched him disappear in the forest.

* * *

A man crawled upon his belly through the snow. On every hand loomed the moose-hide lodges of the camp. Here and there a miserable dog howled or snarled abuse upon his neighbor. Once, one of them approached the creeping man, but the man became motionless. The dog came closer and sniffed, and came yet closer, till its nose touched the strange object which had not been there when darkness fell. Then Hitchcock, for it was Hitchcock, upreared suddenly, shooting an unmittened hand out to the brute's shaggy throat. And the dog knew its death in that clutch, and when the man moved on was left broken-necked under the stars.

In this manner Hitchcock made the chief's lodge. For long he lay in the snow without, listening to the voices of the occupants and striving to locate Sipsu. Evidently there were many in the tent, and from the sounds they were in high excitement.

At last he heard the girl's voice, and crawled around so that only the moosehide divided them. Then, burrowing in the snow, he slowly wormed his head and shoulders underneath. When the warm inner air smote his face he stopped and waited, his legs and the greater part of his body still on the outside. He could see nothing, nor did he dare lift his head. On one side of him was a skin bale. He could smell it, though he carefully felt to be certain. On the other side his face barely touched a furry garment which he knew clothed a body. This must be Sipsu. Though he wished she would speak again, he resolved to risk it.

He could hear the chief and the witch doctor talking high, and in a far corner some hungry child whimpering to sleep. Squirring over on his side, he carefully raised his head, still just touching the furry garment. He listened to the breathing. It was a woman's breathing; he would chance it.

He pressed against her side, softly but firmly, and felt her start at the contact. Again he waited, till a questioning hand slipped down upon his head and paused among the curls. The next instant the hand turned his face gently upward, and he was gazing into Sipsu's eyes.

She was quite collected. Changing her position casually, she threw an elbow well over on the skin bale, rested her body upon it, and arranged her *parka*. In this way he was completely concealed. Then, and still most casually, she reclined across him, so that he could breathe between her arm and breast, and when she lowered her head her ear pressed lightly against his lips.

"When the time suits, go thou," he whispered, "out of the lodge and across the snow, down the wind to the bunch of jackpine in the curve of the creek. There wilt thou find my dogs, and my sled, packed for the trail. This night we go down to the Yukon; and since we go fast, lay thou hands upon what dogs come nigh thee, by the scruff of the neck, and drag them to the sled in the creek curve."

Sipsu shook her head in dissent; but her eyes glistened with gladness, and she was proud that this man had shown toward her such favor. But she, like the women of all her race, was born to obey the will masculine, and when Hitchcock repeated "Go!" he did it with authority,

and though she made no answer he knew that his will was law.

"And never mind harness for the dogs," he added, preparing to go. "I shall wait. But waste no time. The day chaseth the night away, nor does it linger for man's pleasure."

Half an hour later, stamping his feet and swinging his arms by the sled, he saw her coming, a surly dog in either hand. At the approach of these his own animals waxed truculent, and he favored them with the butt of his whip till they quieted. He had approached the camp up the wind, and sound was the thing to be feared most in making his presence known.

"Put them in to the sled," he ordered when she had got the harness on the two dogs. "I want my leaders to the fore."

But when she had done this, the displaced animals pitched upon the aliens. Though Hitchcock plunged among them with clubbed rifle, a riot of sound went up and across the sleeping camp.

"Now we shall have dogs, and in plenty," he remarked grimly, slipping an axe from the sled lashings. "Do thou harness whichever I fling thee, and between-whiles protect the team."

He stepped apace in advance and waited between two pines. The dogs of the camp were disturbing the night with their jangle, and he watched for their coming. A dark spot, growing rapidly, took form upon the dim white expanse of snow. It was a forerunner of the pack, leaping cleanly, and after the wolf fashion, singing direction to its brothers. Hitchcock stood in the shadow. As it sprang past he reached out, gripped its forelegs in mid-career, and sent it whirling earthward. Then he struck it a well-judged blow beneath the ear, and flung it to Sipsu. And while she clapped on the harness he, with his axe, held the passage between the trees, till a shaggy flood of white teeth and glistening eyes surged and remained just beyond reach. Sipsu worked rapidly. When she had finished, he leaped forward, seized and stunned a second, and flung it to her. This he repeated thrice again, and when the sled team stood snarling in a string of ten, he called "Enough!"

But at this instant a young buck, the forerunner of the tribe, and swift of limb, wading through the dogs and cuffing right and left, attempted the passage.

The butt of Hitchcock's rifle drove him to his knees, whence he toppled over sideways. The witch doctor, running lustily, saw the blow fall.

Hitchcock called to Sipsu to pull out. At her shrill "Chook!" the maddened brutes shot straight ahead, and the sled, bounding mightily, just missed unseating her. The powers were evidently angry with the witch doctor, for at this moment they plunged him upon the trail. The lead-dog fouled his snowshoes and tripped him up, and the nine succeeding dogs trod him under foot and the sled bumped over him. But he was quick to his feet, and the night might have turned out differently had not Sipsu struck backward with the long dog whip and smitten him a blinding blow across the eyes. Hitchcock, hurrying to overtake her, collided against him as he swayed with pain in the middle of the trail. Thus it was, when this primitive theologian got back to the chief's lodge that his wisdom had been increased in so far as concerns the efficacy of the white man's fist. So, when he orated then and there in the council, he was wroth against all white men.

* * *

"Tumble out, you loafers! Tumble out! Grub'll be ready before you get into your footgear!"

Dave Welse threw off the bearskin, sat up, and yawned.

Hawes stretched, discovered a lame muscle in his arm, and rubbed it sleepily. "Wonder where Hitchcock bunked last night?" he queried, reaching for his moccasins. They were stiff, and he walked gingerly in his socks to the fire to thaw them out. "It's a blessing he's gone," he added, "though he was a mighty good worker."

"Yep. Too masterful. That was his trouble. Too bad for Sipsu. Think he cared for her much?"

"Don't think so. Just principle. That's all. He thought it wasn't right—and, of course, it wasn't—but that was no reason for us to interfere and get hustled over the divide before our time."

"Principle is principle, and it's good in its place, but it's best left to home when you go to Alaska. Eh?" Welse had joined his mate, and both were working pliability into their frozen moccasins. "Think we ought to have taken a hand?"

Sigmund shook his head. He was very busy. A scud of chocolate-colored foam was rising in the coffee-pot and the bacon needed turning. Also, he was thinking about the girl with laughing eyes like summer seas, and he was humming softly.

His mates chuckled to each other and ceased talking. Though it was past seven, daybreak was still three hours distant. The aurora borealis had passed out of the sky, and the camp was an oasis of light in the midst of deep darkness. And in this light the forms of the three men were sharply defined. Emboldened by the silence, Sigmund raised his voice and opened the last stanza of the old song:

"In a year, in a year, when the grapes are ripe—"

Then the night was split with a rattling volley of rifle shots. Hawes sighed, made an effort to straighten himself, and collapsed. Welse went over on an elbow with drooping head. He choked a little, and a dark stream flowed from his mouth. And Sigmund, the Golden-Haired, his throat a-gurgle with the song, threw up his arms and pitched across the fire.

* * *

The witch doctor's eyes were well-blackened, and his temper none of the best; for he quarreled with the chief over the possession of Welse's rifle, and took more than his share of the part-sack of beans. Also he appropriated the bearskin, and caused grumbling among the tribesmen. And finally he tried to kill Sigmund's dog, which the girl had given him, but the dog ran away, and he fell into the shaft and dislocated his shoulder on the bucket. When the camp was well looted they went back to their own lodges, and there was a great rejoicing among the women. Further, a band of moose strayed over the south divide and fell before the hunters, so the witch doctor attained yet greater honor, and the people whispered among themselves that he spoke in council with the gods.

But later, when all were gone, the shepherd dog crept back to the deserted camp, and all the night long and a day it wailed the dead. After that it disappeared, though the years were not many before the Indian hunters noted a change in the breed of timber wolves, and there were dashes of bright color and variegated markings such as no wolf bore before.

THE MOUNTAIN GAME OF EUROPE

CHAMOIS SHOOTING

By W. A. Baillie-Grohman

OF the 12,000 or so of chamois annually killed in the Alps, the majority are shot in drives, in which I include what might be called "moving the game," *viz.*, sending a few men over ground without the shouting and general hubbub incidental to a regular drive where three or four score of beaters are used and guns and pistols are fired.

This moving of the game is at once more sportsmanlike and less harmful, for it does not scare chamois to anything like the same extent as does a big drive. The results are, of course, on a smaller scale, and in very large estates where the head of game consists of two or three thousand chamois, it would take up too much time.

On very extensive properties, such as Prince Auersperg's famous preserves in the

Zillertal, where over 200 chamois are annually shot in the six days, which is all that this great Austrian sportsman can devote to his Tyrolese shooting, the rule

is observed that only once in three years is one and the same district driven. But there are not many estates large enough to permit such considerate treatment, and in the majority of preserves one annual drive is found to answer sufficiently well, provided the ground is not harassed in

the meantime by frequent stalking.

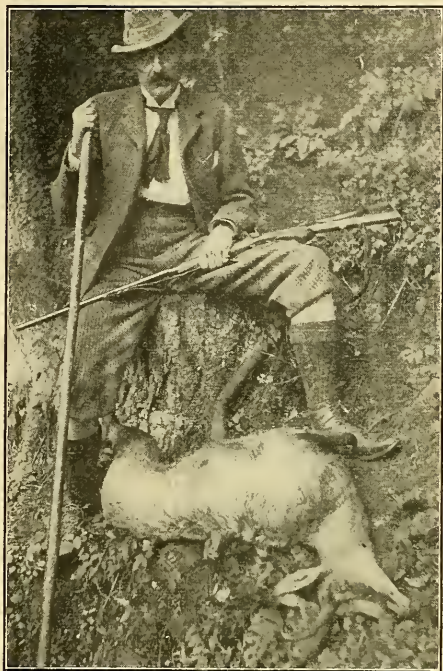
Looked at from a game preserving point of view, the new nitro-powder, small-bore rifles now in general use for mountain sport, possess distinct advantages, for not only is the percentage of wounded game that escape capture to die a lingering death far less than it used to be in the days of black powder and large bores, but game remain more undisturbed by the much less loud report of the small bores.

In the ravines and corries of the Central and

Eastern Alps, which are to-day the principal resorts of chamois (the Swiss or Western Alps harboring comparatively few), the thundering peal of the



A Successful Shot.



The Author and his Last Buck.

old Express rifle echoed and re-echoed to an alarming degree, and effectually frightened every chamois in the place within ear-shot.

Very different is the result of the sharp but "dead" crack of the Mannlicher or Mauser repeater. It goes without saying that the tremendous velocity and exceedingly flat trajectory of the small-bore bullet, which latter to be effective on game must, of course, be dum-dummed, (*i. e.*, leave the top of the lead unsheathed by the nickel or steel envelope,) is another great advantage.

To come to the drive itself, it is a sport which entails infinitely less fatigue than does stalking, and, indeed, in most cases might be described as a very luxurious form of *Jagd*. Paths lead up from the lodge to the different stands occupied by the guns, and if the host is himself an elderly man not above the use of a sure-footed mule or mountain pony, the same fatigueless means of climbing the steep slopes is generally placed at the disposal of his guests.

Chamois drives are difficult to arrange, and without great experience on the part of those organizing them, failure is certain, for the wonderfully keen eyesight

and scent of the animal that is to be circumvented and forced to take a certain line of flight, calls for first-rate generalship and minute acquaintance with every inch of the ground. Even then, a sudden change in the weather can at the last hour imperil success, for if the wind shifts from the direction in which it is expected it will blow during the two or three hours which the drive occupies, the presence of the guns at their stands is betrayed to the wary game a mile or two off, and, of course, the latter will take its path in any other direction but the desired one. On such occasions the sixty or seventy beaters, all picked cragsmen, will shout themselves hoarse and perform the most daring climbing feats without bringing a single chamois to the stands, and a day which at the start augured well will terminate in depressing failure.

As a rule, in the regions I am speaking of the wind blows from one of two directions, hence an experienced head-keeper usually has two strings to his bow, and will take each drive in accordance with the direction in which he thinks the wind will blow during those critical hours that ensue after his final dispositions have been made and the commencement of the drive. It is in this interval that a sudden veering of the breeze will be received with general objurgation on the part of every one concerned.

The steady pot-shot at an unconscious-ly grazing buck, which is such a frequent feature of the quiet stalk, is an incident sadly missed at drives even by the most experienced shot, for the alarmed game not only approaches at a fast pace, but in most cases it has seen the sportsman long ere the latter has seen it.

Were it not for one peculiar habit of chamois, the shooting of this beast in a drive would be even more difficult than it is. By nature a cautious animal, its usual manœuvre is to survey its proposed route some distance ahead, and for this purpose the solitary old buck, as well as the cautious doe that leads the long string of small fry, will, as they progress toward the stands, occasionally come to a brief halt in order to scan the next few hundred yards ahead. These halts when the animals are really alarmed are very brief and uncomfortably far apart, but experience comes to the assistance of the tried sportsman, and in well-known

"passes" where the precipitous nature of the surrounding ground forces the flying beasts to follow certain ledges, an experienced eye will have spotted in advance the knoll or projecting rock where the leader will probably stop to spy.

During this momentary halt the sportsman must first of all make sure that the beast is a buck, for does should not be killed, and then put in his shot. To hit a running chamois at anything but the shortest distances is a feat few marksmen will achieve with any regularity, for, unlike a galloping stag, the chamois' flight is uneven, not only in consequence of the rough ground, but also owing to the beast's jerky movements and agile leaps.

To tell the buck from the doe is a difficult task at best, for the difference in adults is minute, consisting principally in the buck in slightly thicker horns at the base, and a triflingly different crook to the hooked end. The most experienced men will frequently mistake the sex in chamois, an incident that occurred to me but a week ago proving this in a laughable manner. I was shooting with a friend, and on our return from a drive to the valley far below us we skirted a deep ravine. The head-keeper was leading with two other subordinates following him, while some beaters, all old hands, were also among the party. Suddenly the keepers spied a chamois quietly grazing on either side of the ravine about 230 yards or so off. Half a dozen telescopes were immediately focused on the beast, with the result that it was unanimously pronounced "*Ein capitaler Bock*"—a very fine buck. My kind host gave me first shot, for I had

been somewhat unlucky that day, my stand having been visited by two or three scores of does and kids, but nary a single shootable male among them. My Mauser bullet placed in exactly the right spot resulted in a dying leap and a fall down the tremendous precipice near which the "veteran buck" had been grazing. General congratulations followed my shot, mingled with commiseration at my bad luck for imperiling those fine horns by such a terrific fall.

From the nearest point of access the keepers hurried down to my victim's body, that had landed in the center of a bunch of dense *Latchen*, or dwarf pine, in which it was not easy to find it. When finally the head-keeper dragged the limp carcass from under the thick bush, what was my surprise to see him throw up his hands and shout to us in accents of extreme mortification: "Why, it's a doe after all!" My host and I, who were the only ones who had not examined the beast with our glasses, had this time the laugh on our side, for here were some six natives who had passed their lives from their earliest youth in the midst of chamois, but who failed to distinguish the male from the female, notwithstanding the fact that the horns which, by the way, had remained quite intact, were undersized typical specimens of the female's trophy.



A Shooting Lodge Above Timber Line in Tyrol



The Late King Victor Emanuel of Italy,
The Chamois' Preserver.

They are hanging before me now, and if in future I shall feel less mortified when making similar mistake, that "*Capiteler Bock*" will not have died in vain.

Twenty-four hours later another of my host's unlucky gentle sex came to a bad end. My boy, an urchin of twelve, over from England for his holidays, was to shoot his first chamois, and our generous host had given him special permission to turn loose at the first thing that came within range of his little double-barreled rifle, quite irrespective of sex.

Life in these delightful little shooting lodges high up on the Tyrolese, Salzburg and Styrian mountains is the pleasantest possible. Everything is of the plainest and simplest, as it should be in such out-of-the-way spots where you are literally surrounded by Nature at her grandest and wildest. Here luxurious furniture, epicurean meals and all the poms and vanities of modern life would be as much out of place as evening dress in lieu of the practical and withal picturesque costume of the country. Here it is the ambition of every right-minded sportsman to dress as much like the native as circumstances and an untanned skin will permit. In-

deed very often the prince's leather "shorts" look far shabbier and worse for wear than those worn by the keeper, who naturally dons his best Sunday pair in honor of his master's visit.

What a glorious appetite makes that somewhat greasy-looking dish of *Schmarn*, or yonder formidable hill of Tyrolese *Knödel* look foolish! What a glorious thirst makes that beaker of Munich beer taste better than any '84 Pommery you have ever quaffed! And what glorious, restful sleep sinks down upon your limbs when, after a twelve-hour day on the rocks, you throw yourself on the mattress filled with fragrant mountain hay in lieu of down! No wonder that after a month among these health-giving surroundings you return to your town life a different man, for in the keen, bracing air of these altitudes the weak become strong and the old feel once more the vigor of youth.

The keepers are invariably thoroughly good fellows, keen sportsmen and most amusing companions. The relations between them and their masters are most cordial, and have about them nothing of the servile tone one might well expect in a country where serf servitude was an institution which the present generation can still recollect.

On some great estates scores of keepers and foresters are employed. In 1898, on the occasion of the Emperor of Austria's Jubilee, the *jaegers* of Austria fêted their venerable sovereign by presenting in person an address. Over 7,000 of them took part, and all were dressed in their respective National costume. Most of the great noblemen of the country participated in the procession at the head of their own men.

Most of the chamois shoots are owned by members of the sport-loving Austrian aristocracy, who practically are the only men who go in for sport of any kind in a country where commercial and industrial wealth is neither as common or as privileged as it is among less conservative but more enterprising peoples.

Foreigners, so far chiefly represented by Prussian noblemen and some German royalties, not to omit the English prince occupying the Saxe Coburg throne, own some excellent Austrian chamois ground. But good preserves do not come very often into the market, and they are hard-

ly ever let for such short periods as is a common but very harmful practice in Scotland in the case of deer forests. These latter are commonly let for one season, and as every tenant naturally tries to get the best heads in return for his high rent, and shoots them before the commencement of the rut, only small stags are left to propagate their species, which is obviously a thoroughly bad system, and has led to an almost general degeneration of heads. Of late years several English sportsmen have rented chamois preserves in Styria, Tyrol and other Austrian provinces, and have been much pleased with the sport, as well as with the whole novel surroundings. A good preserve with a limit, say, of fifty or sixty chamois, can be obtained for a third of what a Scotch forest with the same number of stags would cost, for £500 will cover rent, keepers and everything except the personal expenses of the tenant. I have often wondered why none of the well-to-do Englishmen and Americans who spend their holidays in idle *dolce far niente* in Swiss hotels take to this exhilarating sport. To become a fairly good hand at driving chamois makes no great demands upon an able-bodied man who is at all accustomed to an outdoor life.

If the new-comer should wish to kill two flies, or, rather, two of the most prized species of mountain game in one and the same shoot, this is easily contrived, for on many properties stags frequent the solemn, dark pine forests that clothe the lower slopes of mountains on the higher parts of which numerous chamois are to be found. These mixed preserves are rather

more expensive than those harboring chamois only, for deer do much damage to the crops of the peasants in the valleys below, and these damages have to be made good by the owner or the tenant, and as these are rich men, the commissioners who adjust these *Wildschaeden* claims do not let the peasant lose by the neighborhood of deer.

The "head" (antlers) of the Alpine stag is not as fine as that of his Hungarian brother, who enjoys far better climatic conditions, but they are superior to the Scotch heads. His chase is a very different one, however, for, unlike the great bare moors and fells of Scotland, the Continental deer's home is in dense forests where he can be spotted only during the rutting season, when he betrays his presence by his proud challenge to combat and its resulting contests.



Keepers and Beaters Starting to Drive in the Tyrol.

EVOLUTION OF THE "KENTUCKY REEL" *

By Dr. James A. Henshall

THE multiplying fishing reel originated in Kentucky about the beginning of the Nineteenth Century. It has been asserted that it was first made in England, but I have been unable to find any reference to it, even in the oldest British works on angling. It certainly has not been used there within my recollection. For a century the British angler has used the single-action reel for all branches of fishing.

James Lane Allen has shown that the good people of the blue-grass region of Kentucky exhibit many of the distinctive traits and customs of their English and Scotch-Irish ancestors; but in no feature is this heredity more pronounced than in their love for angling. With them, angling is the outward manifestation and practice of an inherent and inherited attribute, and is in no sense a fad or hobby.

Black-bass fishing, as an art, had its origin on the historic soil of Old Kentucky, in that particular portion known as "God's own country"—the blue-grass section. It was especially the counties of Fayette, Bourbon, Woodford, Scott and Harrison that were renowned for their skilled anglers, who fished the then famous streams of the Kentucky River, its tributary, the Elkhorn, and the Licking, Stoner and other adjacent waters.

At that time the Kentucky River was a free-flowing stream, without dams between Frankfort and its mouth. It abounded in black bass, pike-perch (called "salmon"), pike and occasionally a mascalonge. I have seen heads of the three last-named species from the Kentucky, Ohio and Tennessee Rivers, preserved as trophies by old-time anglers, of which the fish must have weighed at least forty pounds.

Most of these anglers were among the best and brightest and most intelligent

and cultivated men of that period, who adorned the several professions or were the lordly proprietors of vast domains of perennial green. Among others may be mentioned the well-known Kentucky family names of Clay, Bedford, Hume, Brown, Morris, Bibb, Bacon, Holman, McCurdy, Mills, Ennis, Harvey, Blair, Crittenden, etc.

The rods used by these pioneers of bass fishing consisted of the upper ten feet of a well-seasoned, light and straight native cane reed, weighing from four to six ounces when complete with guides and tip. The reel was lashed or seized to the butt of the rod, the reel-plate having holes in the ends for this purpose, as may be seen in some of the illustrations following. The line was that known as "sea-grass," though really raw silk, and the size the smallest made, or No. 1. It will be seen from this that the tools and tackle were as light, if not so suitable or elegant, as those of the present day.

Mr. J. L. Sage, of Lexington, Ky., a veteran angler, who is still making "Kentucky reels," presented me with a click reel, and showed me his fly-rod and flies, all made and used by him as long ago as 1848; so that fly-fishing for black bass was practiced as early in Kentucky as in any other section of the country.

At a very much earlier day, about 1810, there existed the Bourbon County Angling Club, of which George Snyder, of Paris, Ky., was the president; and he it was who made the first "Kentucky reel," which has since become so famous, and in my opinion the first multiplying reel in the world. Previous to this time the black-bass angler was compelled to use the old single-action reel, usually of English make, or the discarded spool from his wife's work-basket, when of large size, and mounted on a frame by the local tin-smith.

To this day the octogenarian angler in Kentucky calls his reel a spool. Mr. Sage informed me that he had seen the spool used on the Cape Fear River, near Wilmington, N. C., in 1839 and 1840.

George Synder was born in the same county as Daniel Boone—Bucks, Pa. He

*As Assistant Chief of the Fisheries Department of the World's Columbian Exposition, at Chicago, in 1893, I had charge of the Angling Building, and, among other exhibits, I had a collection of "Kentucky reels," embracing those of Snyder, the Meeks, Hardman, Milam, Sage and others. It showed the evolution of the reel from the old-fashioned, home-made wooden spool, mounted by the local blacksmith, to the fine productions of the present time. This article is based on that collection. The pen-drawings of the oldest reels are by Mr. Charles Bradford Hudson, except several by myself.

went to Paris, Ky., then called Hopewell, about 1803, and died there on February 10th, 1841, aged sixty years. He was a skilful watchmaker and silversmith; being a good practical angler, and seeing the necessity for a rapid multiplying reel for black-bass fishing with the live minnow, he proceeded to invent one. Snyder's first reel was made for his own use, about 1810. He afterward made reels for members of his club, and others.

Some twenty years ago the late David M. Snyder, of Cynthiana, Ky.—the last surviving son of George Snyder—showed me a reel made by his father, in which the ends of the spool-shaft were beveled to points which fitted into beveled recesses of pivots that screwed into the center caps of the outer disk-plates of the reel. By this compensating device any wear could be readily taken up, or the running of the reel regulated by a turn of these screw pivots.

It will be noticed, perhaps, that all of the Snyder reels figured are quite narrow in diameter of the spool, and also much longer than in those of the present day. This is in accordance with the fact that a long, narrow spool runs more rapidly, all things being equal, than where the spool is short and of greater diameter. I have seen but one Snyder reel of large size, which was no doubt employed for large fish, as mascalonge, pike and the so-called "salmon" (pike-perch or walled-eyed pike). This reel is shown in the illustrations. Its peculiarities are a curiously-shaped flat lever, for operating the alarm spring by means of a pin working in a curved slot, and the flat brass drag spring, which is on the outside of the back disk-plate. I imagine it was placed there to allow of its being used while the reel was running, which would prove quite an advantage while playing a large fish. This reel is in the possession of Mr. R. J. Snyder, of Louisville, Ky., who says it is one of the oldest reels made by his grandfather.

A very interesting reel is one made by George Snyder, in 1821, for Hon. Brutus J. Clay, who was a member of Congress in 1864. It is now owned by his son, Mr. C. F. Clay, of Bourbon County, Ky., and is still in good condition, though it has been used by Mr. Clay and his father for nearly seventy years. It is marked in script, "G. S., Feb. 1, 1821." This, like all of

George Snyder's reels, has the steel ends of the spool-shaft projecting through holes in the center of the disk-plate. Also, as in all of Snyder's reels, the pillars are riveted to the back plate, and project through the inner front plate, where they are secured by wire keys.

Another reel made by George Snyder, not later than 1825, is reproduced to show a peculiar feature, one that I have never seen before nor since in a "Kentucky

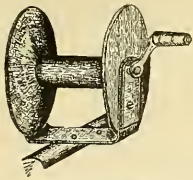


Mr. Benjamin C. Milam.

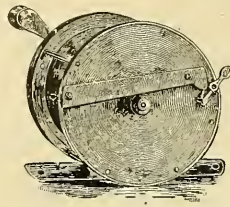
reel," and that is the absence of both drag and alarm. There is nothing but the lock-stop, whereby a pin in the flat brass spring drops into a hole in the spool-disk. I cannot conceive how a Kentucky angler of the olden time could be content to fish without an alarm spring to his reel! I am free to say, however, that of all of Snyder's reels which I have seen I prefer this one, for, personally, I have no use for either drag, click, alarm or lock in a multiplying reel.

After Snyder's death two of his sons, John and Charles Snyder, succeeded to his business, and they made a few reels. One is now in my possession, and I have seen but one other, owned by Mr. W. W.

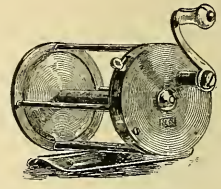
Evolution of the "Kentucky Reel"



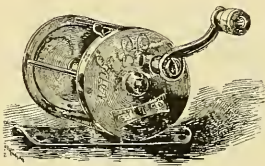
1. Old Wooden Spool.



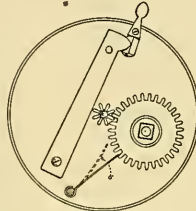
5. Large Snyder Reel, Back View.



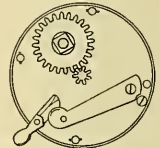
9. Snyder Reel.



2. G. Snyder's Own Reel.



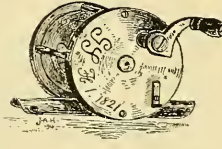
6. Large Snyder Reel Gearing.



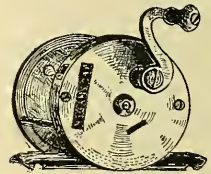
10. Snyder Reel Gearing.



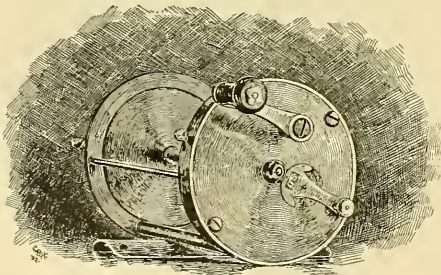
3. G. Snyder's Own Reel Gearing



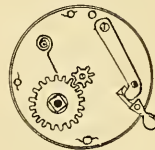
7. Clay's Snyder Reel.



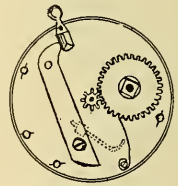
11. J. & C. Snyder Reel.



4. Large Snyder Reel, Front View.



8. Clay's Snyder Reel Gearing.



12. Massie's Reel Gearing.

Fig. 1.—Black wooden spool mounted on iron frame. Disk $1\frac{3}{4}$ inches diameter; $1\frac{3}{4}$ inches between disks; flat iron crank with black wooden handle; holes in ends of reel-plate for seizing to rod.

Fig. 2.—George Snyder's own reel, made of brass in 1810. Disk-plates $1\frac{3}{8}$ inches diameter; length of spool $1\frac{3}{8}$ inches. Marked in script "G. Snyder" and stamped "G. S."

Fig. 3.—George Snyder's own reel gearing. Brass lock spring, silver alarm spring.

Fig. 4.—Brass reel made by Geo. Snyder about 1820. Disk-plates $2\frac{3}{8}$ inches diameter; length of spool, $2\frac{3}{8}$ inches.

Fig. 5.—Showing back disk-plate with drag-spring outside.

Fig. 6.—Showing gearing. Steel wheel with 32 leaves; steel pinion with 8 teeth, a quadruple multiplier.

Fig. 7.—Reel made by George Snyder in 1821; brass, in good condition; $1\frac{1}{2}$ inches in diameter; length, $1\frac{1}{2}$ inches.

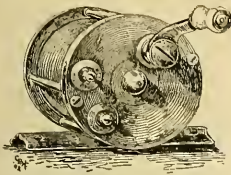
Fig. 8.—Gearing. Brass wheel with 21 leaves; steel pinion with 7 teeth; triple multiplier.

Fig. 9.—This reel was made sometime between 1818 and 1822. It is of brass, like all of Snyder's reels. It is in excellent condition to-day. Diameter, $1\frac{5}{8}$ inches; length, $1\frac{1}{2}$ inches.

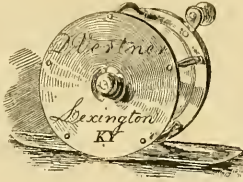
Fig. 10.—Gearing. Brass wheel with 24 leaves; multiplies $3\frac{1}{2}$ times.

Fig. 11.—Brass reel stamped "J. & C. Snyder." Diameter $1\frac{3}{4}$ inches; length of spool $1\frac{7}{8}$ inches; multiplies four times.

Fig. 12.—Brass reel made by Charles Snyder for present owner, Mr. W. W. Massie. Diameter, $2\frac{1}{8}$ inches; between disks, 2 5-16 inches. Operated by a bent arm of steel wire, which is moved by a small block attached to an outside oblong slide.



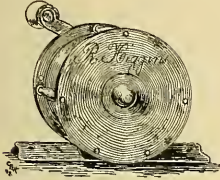
13. Higgins' J. F. Meek Reel, Front View.



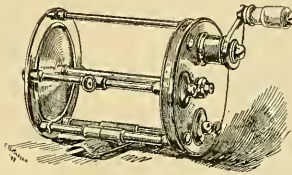
17. Vertner's J. F. Meek Reel, Back View.



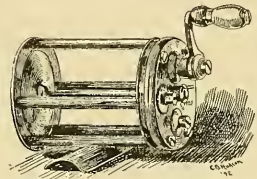
21. Bell Click.



14. Higgins' J. F. Meek Reel, Back View.



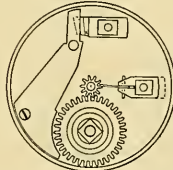
18. Hardman Reel.



22. Meek & Milam Reel.



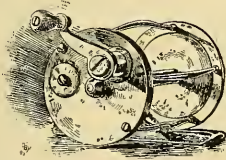
15. Higgins' J. F. Meek Reel Gearing.



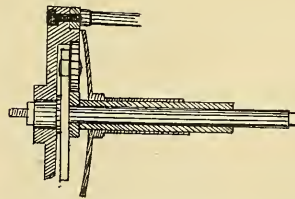
19. Hardman Reel Gearing.



23. Meek & Milam Reel Gearing.



16. Vertner's J. F. Meek Reel, Front View.



20. Bell Click Gearing.

Fig. 13.—Brass reel made by J. F. Meek about 1840. In fair condition, perfectly plain. Diameter $1\frac{5}{8}$ inches; length $1\frac{1}{4}$ inches.

Fig. 14.—Showing back disk-plate of No. 13.

Fig. 15.—Gearing. Steel wheel with 34 leaves; steel pinion with 8 teeth; multiplies a little more than four times.

Fig. 16.—Solid silver reel made by J. F. Meek about 1840. In good condition. Diameter $1\frac{1}{2}$ inches; length 1 15-16 inches.

Fig. 17.—Back disk-plate of No. 16.

Fig. 18.—German silver reel made by J. W. Hardman Diameter 2 1-16 inches; length 2 inches

Fig. 19.—Gearing of No. 18.

Fig. 20.—Epicycloidal wheel.

Fig. 21.—Bell click, showing bells and hammers.

Fig. 22.—Brass reel made by B. C. Milam and stamped "Meek & Milam No. 1." In excellent condition. Diameter, $1\frac{3}{4}$ inches; length, 1 5-16 inches.

Fig. 23.—Gearing is essentially as made to-day.

Massie, of Paris, Ky. The latter is stamped "G. S.," but was made by Charles Snyder expressly for Mr. Massie, who saw him at various times at work on it. Both reels were made between 1841 and 1844.

The next person to turn his attention to reel making, after the elder Snyder, was Jonathan Fleming Meek, also a skilful watchmaker. He went from Danville, Ky., to Frankfort, about 1833, where he made his first reel for Hon. Mason Brown, of Frankfort, a noted jurist of his day, and a devoted angler. Judge Brown, having had his Snyder reel borrowed or stolen just at a time when the bass began to bite their best, prevailed on Mr. Meek to make him one.

At an early day there were quite a number of Kentuckians who owned plantations in Mississippi, Louisiana and Arkansas, but spent thier summers in Kentucky. Two of the Meek reels shown



Mr. J. L. Sage.

were made for such parties. One for Mr. R. Higgins, of Lexington, a Mississippi planter, the other for Mr. D. Vertner, a Louisiana planter. The latter reel is now in the possession of his grand-daughter, Mrs. Alexander Jeffrey, of Lexington, Ky.

These reels, it will be observed, are improvements in some respects on the Snyder reels. There is a collar around the crank-shaft; the ends of the spool-shaft do not project, and the alarm and drag springs are operated by sliding buttons, as in the modern reel.

It seems that about the time that Jonathan F. Meek made his first reel, in 1833, or soon after, at least one reel was made by Theodore Noel, also a watchmaker of Frankfort.

J. F. Meek continued to make reels until about 1840, when he formed a partnership with his brother, Benjamin F. Meek, who was likewise a fine watchmaker. After this the reels were made by B. F. Meek, and stamped "J. F. & B. F. Meek."

About the year 1843 a very fine workman and expert watchmaker, of Louisville, Ky., named J. W. Hardman, began making multiplying reels for black-bass fishing. His reels were a great improvement on those previously made by others. He shortened the spool and increased the diameter, affixed the pillars to the disk-plates by screws instead of riveting, added some ornamentation, and altogether made the first true and substantial improvements in the "Kentucky reel," both as to its practicability and appearance, and these were followed thereafter by all other makers. The "Kentucky reel" to-day bears testimony to his unmistakable genius and fine handiwork. The Hardman reel illustrated is the property of Mr. J. F. Speed, of Louisville, Ky., and is in excellent condition. It was made about 1845, and is a very handsome piece of work, of German silver. The sliding buttons are gold-plated, as are the screws. The ornamentation is very fine and workmanlike.

Mr. Benjamin C. Milam, whose name is almost synonymous with the "Kentucky reel," went to Frankfort, Ky., in 1835, and worked awhile with Beverly Noel, a watchmaker, a brother to Theodore Noel, previously mentioned. He visited Paris, Ky., in 1836, and saw George Snyder and his reels. In this same year he engaged as an apprentice to J. F. Meek, and it was not long before the reel making was given over to him and B. F. Meek, when the latter came into the firm.

The Meek brothers dissolved partnership about 1851, Jonathan going to Louis-

ville, but returning again to Frankfort just before his death in 1884. After the withdrawal of J. F. Meek, the firm became Meek & Milam, which in turn was dissolved at the end of five years, though the former partners continued to occupy the same store, Milam devoting himself to making reels, while B. F. Meek took the watchmaking and jewelry business. All reels made by Mr. Milam continued to be stamped "Meek & Milam" until 1878, when he used his own stamp of "B. C. Milam." In later years, having trained his son to the trade, he took him into his business under the firm name of B. C. Milam & Son, which is continued to the present time.

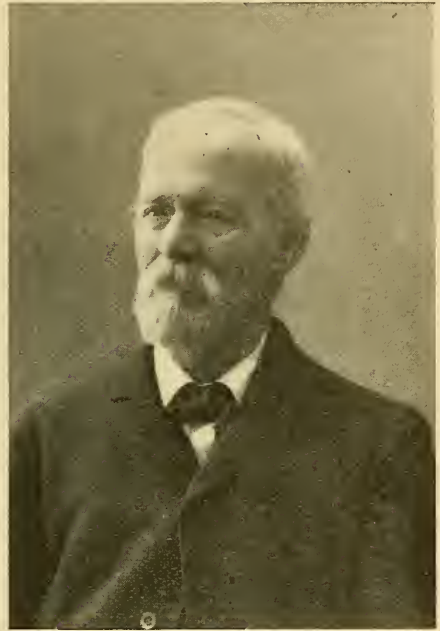
There were a few reels with so-called "centrifugal gearing" made at an early date by B. F. Meek, a Mr. Barbour, of Georgetown, Ky., and B. C. Milam. Among the reels I exhibited at the Chicago World's Fair was a very elaborate and ornamental one of solid silver, made by B. F. Meek, about 1846, for an artist of New Orleans, T. S. Mayeau. A novel feature of this reel was the "bell-click," made upon the same principal as the repeating watch, whereby the artist-angler could really enjoy the "Music of the reel," the two bells being tuned in thirds.

The peculiar mechanism of the reel is the application of the principle of the epicycloidal wheel, whereby reciprocating motion is converted into circular motion. While the power of this plan of gearing is greater than in the ordinary reel with two wheels, the friction is also too great for casting; consequently it was abandoned.

An old reel stamped "Meek & Milam" was exhibited in my collection, made somewhere about 1844, and is shown in the accompanying illustrations. The pillars are still of the Snyder plan, as also the long narrow spool. The improvements are a collar to crank-shaft, sliding buttons for alarm and drag, and a better shape to front disk-plate. Here we have for the first time the bent or U-shaped alarm spring formed of a piece of watch spring. It will be further observed that with the exception of the ornamental bars or pillars of the Hardman reel, this reel is a close imitation of it in its general form, in the sliding buttons and their screws, in the collar and the retaining screw of the crank. A strong resem-

blance is also seen in the gearing, more especially in the sliding blocks and drag spring.

Mr. J. L. Sage, of Lexington, Ky., but previously of Frankfort, was also an early maker of the "Kentucky reel," and I am



Mr. Benjamin F. Meek.

satisfied that he was the first to make a click reel, in Kentucky, for black-bass fly-fishing, of which branch of angling he was one of the pioneers. I have the smallest and neatest "Kentucky reel" I have ever seen; it was made by Mr. Sage.

In 1883, Mr. B. F. Meek went to Louisville, Ky., where he entered on a new era of reel making. He formed a partnership with his two sons. He made a new departure in the gearing of the reel, which he called the "spiral gear." This consists in cutting the teeth of the wheel and pinion obliquely or diagonally, instead of horizontally. The space between the teeth, at their base, is also cut rounding, instead of flat or square.

Other makers of the "Kentucky reel" are Geo. W. Gayle, of Frankfort, and James Deally, of Louisville. The reel as now made is still principally for black-bass fishing, though larger sizes are furnished for striped bass and tarpon.

STREAM-MUSIC

By Charles H. Crandall

IT is one of the most difficult, and in some respects one of the most irksome, of tasks to analyze one's love for an object or for a person. Do we love this or that? Enough! The mere bliss of loving is sufficient. Shall we count the red corpuscles in our veins and time their pace when they leap at the mention of the loved object or spirit? No, we abjure the analytical criticism. For the same reasons I could never take pencil and paper to a brook-side and there spread out on the unsympathetic page my passion for streams, for the music of brooks, for the soothing, healing sound of the waters on their cheerful journey to the sea. No, I should fling paper and pencil in the stream and laugh as I saw them bobbing away out of sight while I yielded myself up to the spell of the spirit of the waters.

And yet, in a winter silence, when the

us all. Boy or girl, man or woman, our feet turn naturally down to the valleys when we wish for something of infinite variety, beguiling and cleansing, to wash the sediment of the world away.

Knowingly or not, men have recognized in the rivers those traits that put the stream, of all Nature's objects, most intimately in sympathy with the human soul. We see the brook flow on irresistibly and we know that we also know no halting. From pristine, virgin scenes it fares on as we fare from the bosky retreats of childhood out into the garish struggles of mid-manhood. And sooner or later the ocean swallows all. This is all trite, as one writes it, but it is beautifully sweet and consoling as the brook sings it.

What a marked individuality the brooks have! No two human souls are alike, nor are two brooks, and no two



Purling Over Limestone Ledges.

waterfall is frozen music, a soundless architecture of ice, far from my beloved little river I can sit down and muse over her myriad little graces of manner and tone, shy revelations, coquettish, daring freaks, maidenly modesty, or pure sweet confidences. And the stream-music draws

brooks invite just the same mood. The voice of the Rippowam is not the voice of the Ondawa. I know where to go for a pensive, virgin sweetness of atmosphere, and also where to look for a robust, fine courage and overflow of spirits in a stream.

For "quips and cranks and wanton wiles" you must hie you away to a little hillside laughing "Allegro" of a brook, with waters like flying gold hair, that jumps into meadows and out again into the woods, always at hide-and-seek, and mocking at all followers. In such a stream, even in the most quiet stretches, you will find the trout so electric that they turn double somersaults in the air. Ah, the fortunate little brook, with nothing but a jest for the dull soul that stoops to Care!

This individuality of brooks is, I think, closely linked with the individuality of

"But sweeter rivers, pulsing flit

Through thee as thou through Concord plain.

Thou in thy narrow banks art pent:

The stream I love unbounded goes

Through flood and sea and firmament;

Through light, through life, it forward flows."

So he gleaned a perennial joy from the sober-mooded Concord and left a priceless hint of it in the two noble poems, "Musketaquit" and "Two Rivers."

In another way the great Laureate has



A Laughing Allegro.

writers, who have been largely of the class of stream-lovers; and the more faithfully a poet has clung to his one loved stream and surroundings the more individual and true, in some respects, sounds his note. It took the genius of an Emerson to hear the low voice of the mystic, dreaming Concord, gliding so serenely, seemingly motionless, to the sea; but ah, what a mirror for deep June skies and overhanging trees, for the flash of bird-wings, or for the quiet, everyday, heroic lives of the dwellers on the banks.

The Musketaquit was no enigma to him.

"Thy summer voice, Musketaquit,
Repeats the music of the rain,

blended his own unaging courage in his favorite stream, that, intertwining with the idyl of Philip and Katie, and the hay-fields of the "Willows," stealing from haunts of coot and fern, by lawns and hazel covers, sweeps out in the last stanza with the brave outlook of the poet in "Crossing the Bar":

"And out again to curve and flow

To join the brimming river,

For men may come and men may go

But I go on forever."

It would be a beguiling hour just to wander on the brook-sides with the poets, Wordsworth by the Duddon, or that lesser stream that suggested the unex-

celled beauty of his stanza in the tribute to Lucy:

"The stars of midnight shall be dear
To her, and she shall lean her ear
In many a secret place
Where rivulets dance their wayward round,
And beauty, born of murmuring sound,
Shall pass into her face."

Lovers of streams, too, were Robert Burns, whether singing of the bonnie

Bryant was especially susceptible to the charm and imagery of streams, as shown in his "Rivulet," "The Flood of Years," and other poems.

But we have quoted enough to show the intimacy of poetry and stream-music, whether it comes to a king of bards, "gilding pale streams with heavenly alchemy" on Avon banks, or a Jean Ingelow leading her two lovers down the opposite



The Rippowan.

banks of Ayr or the haunting melody of Afton water, and John Keats, pausing on the bridge to note the minnows that "ever wrestle with their own sweet delight, and ever nestle their silvery bellies on the pebbly sand."

The Green River, up in the Berkshire country, pure, sylvan, retired in its aspect, seems only to reflect the muse of its good gray poet who found blended in its graces the charms of his sweetheart.

"When breezes are soft and skies are fair,
I steal an hour from study and care,
And hie me away to the woodland scene
Where wanders the stream with waters of green."

shores of her river, slipping its shining relentless wedge forever between their "divided" hearts.

So, too, our prose-poets like Izaak Walton, and the author of "Wake Robin," or the versatile singer of "Little Rivers," are never happier than by the streams, casting for trout and hooking iridescent fancies that are light to carry, but make an acceptable creel for their readers.

But when we are really in a passion for the music of brooks we will take no lures for fishes, nor books of poets, however dear, nor pencil nor pen, but in simple ardor, half-abashed, steal down the woodland path under the sentinel hemlocks,

down, down, out of sight of the common world, under the overshadowing banks, below the waterfall and the old wooden bridge to the little cavern or amphitheater where the nymphs really come, and the voice of the stream calls and answers and echoes in a way that thrills like the whisper of a lover.

Here we may pass an afternoon or a whole day, and be sure no time has been wasted, in listening to the water. Now the sound will come to you in a mellow *vox humana* that is almost startling and eerie in its likeness to human speech. In exquisite cadence it will seem almost to converse; and we seem almost to comprehend the sense of the appeal, a tale of longing from an imprisoned spirit, when again the wind will change and the waterfall will go off into a wild, mocking gale of laughter most elfish and provoking. It becomes easy to see how the Greeks peopled the streams with shining nymphs, shy and elusive, and we feel a new brotherhood to Pan, chasing the fleeting naiad to find at last only a sighing along the reedy stream. La Motte Fouque merely had a little better ears and eyes than the rest of us, for the story of Undine, in all its capriciousness and romance and forest charm, is a round every wild-wood brook if we only get the clue and untangle the maze.

It is most fascinating to get at a distance of several hundred yards from a waterfall and listen to the trick the wind plays with stream-music. As the breeze rises and falls or changes in direction so the voice of the cataract will change, running up and down the scale, alternating, too, in quality, from treble to bass, or from a note of careless joy to a sad prescience and foreboding of doom.

In many ways a small stream, a few yards wide, is more eloquent, more full of variety than a large river. The latter moves with a mighty surge and a low un-

dertone, a mingled chorus, the "voice of many waters." But one hardly gets the variety of sentiment, the human accent, that speak in the lesser streams, although there are such confidences in the smaller waves that lisp and lapse along the river's shore.

To listen to Niagara or the St. Lawrence Rapids is like listening to the crowd at Broadway and Wall Street. It is impressive, full of power and pathos, the *basso profundo* of the stream of life, and yet it has its monotony, it leaves one with a more poignant sense of loneliness, even of despair. But he who listens to the pure, sweet mountain brook gains new hope from its living waters. Similarly in art a Millet will put more sentiment in a country scene with two or three human figures than any one ever did on a crowded canvas.

Fortunate mortals are we, then, when we can list to the call of the brook, listen

to its
heart
y laugh,
or its
coo-
ing, woo-
ing love-
song, or
its ser-
mons in
the stones
as it purls
over them



in tones of grave admonishment. By its banks we can dream trouble away, and while we sleep the brook will steal our burden, incorporating it in its own pathos, hurrying with it onward to the sea, there to be lost everlastingly, while we awake and go on joyfully like the Pilgrim to the Celestial City.

Lovely beyond words are the hours in the shaded valley guarded by the lichened cliffs and the cool hemlocks, where the laurel clings half-way up the steep, and the ferns stand so motionless that they, too, seem to be listening. Here even the birds hush their song and no one can believe them insensible to the charm of this sanctuary as they flit noiselessly in the branches overhead. A welcome retreat

down exactly the variations of the stream-music. But one will find it bubbling out in Beethoven's pastoral symphony, in Haydn's "Spring" or Mendelssohn's dainty "Frühlingslied."

"Gladly, gladly, I am gliding,
Fearing naught of ill or sorrow,
Now that light doth lead me on
I feel the grandeur of the way.
Tell me not that night will darken,
Tell me not of a to-morrow,
Till I have fulfilled the mission
And the duty of to-day."

So the sturdy, brave brook sings in its bright and happy moods, and sends us back to the world with new courage. This comrade is so brave and true that it will any service do. And shall we be shamed



The Musketaquit.

they find it in summer when the upland springs are dry and the air shimmering with the heat of an August drouth. Then you will find a congregation of birds in the shaded valley by the brook, though few will utter a note, except perhaps a brown thrush shaking out a call, like a jangle of silvery chains, to exorcise the silence.

With a sturdy song of labor on its lips the stream puts its shoulder to the water-wheel, even to saw up the loved trees of the forest, to grind the grain for the cattle, or to crush out the juice of the apples on dreamy, rich October days.

Sounding thus so many notes and moods, how hopeless it is to try to copy

by this inanimate comrade, dependent as we at last, upon the early and the latter rains for its very life?

Let us carry away the stream-music in our blood, so that even in the dusty paths of life there shall be a glad little brook singing bravely and defiantly as it courses through the heart.

"O how sweet to trust completely,
That the best is still before us,
Letting all our life flow forward
With a faith that naught can foil,
Knowing that the brooks and blossoms
And the starry legions o'er us
Are but brighter-shining comrades
In the brotherhood of toil."

ON THE TRAIL OF THE WILD TURKEY

By Edwyn Sandys

OF all our gallinaceous birds the turkey is king, and he is indeed a regal fellow. Largest of his race, dwarfing the greatest of his remote kin, the grouse, he stands absolutely without a peer in size, beauty of plumage, edible qualities, and when fairly hunted, as a test of the craft and resource of his human pursuer.

Grander feathered trophy than a prime wild gobbler fairly killed never fell to sportsman's aim. His massive body sheathed in bronzy mail, glitters with indescribable lusters; his broad fan of a tail is a beautiful intricacy of browns and black, while the sharply-defined black and white mottlings of the flight-feathers of the wings furnish a pleasing contrast. The one homely thing about a turkey is its head. Small, lean and snaky-looking it cannot be termed a thing of beauty, yet it has an air of keen wildness which is appropriate and not altogether displeasing.

There are four recognized varieties of the wild turkey in the United States. Of these the one to which I shall chiefly refer is *Meleagris sylvestris*, which formerly abounded in the East from the western portion of the Province of Ontario southward to Texas. The other varieties are—the Florida turkey *M. S. osceola*; Elliott's Rio Grande turkey, *M. S. ellioti*, and the Mexican turkey *M. gallopavo*. The last mentioned is the one from which came the domesticated turkey. It is found in Southern and Western Texas, New Mexico and Arizona, and is common in the tablelands of Mexico. It is somewhat larger than *M. sylvestris*, and has a light-colored rump. It haunts the highlands and mountainous regions. Early in the Sixteenth Century it was taken first to the West Indies and thence to England and France, where it soon became firmly established. Many of our present birds also have a strong infusion of the blood of *M. sylvestris* obtained by accidental and intentional crossing. The Rio Grande variety is found in the lowlands of Southern Texas and Eastern Mexico, while its relative of Florida is confined to that State.

Among all of these varieties trifling variations in size and coloration constitute the sole differences, which to the average sportsman mean little or nothing. All the birds are fit to grace any man's board and he who holds straight on one or other is perfectly justified in not bothering further over scientific details.

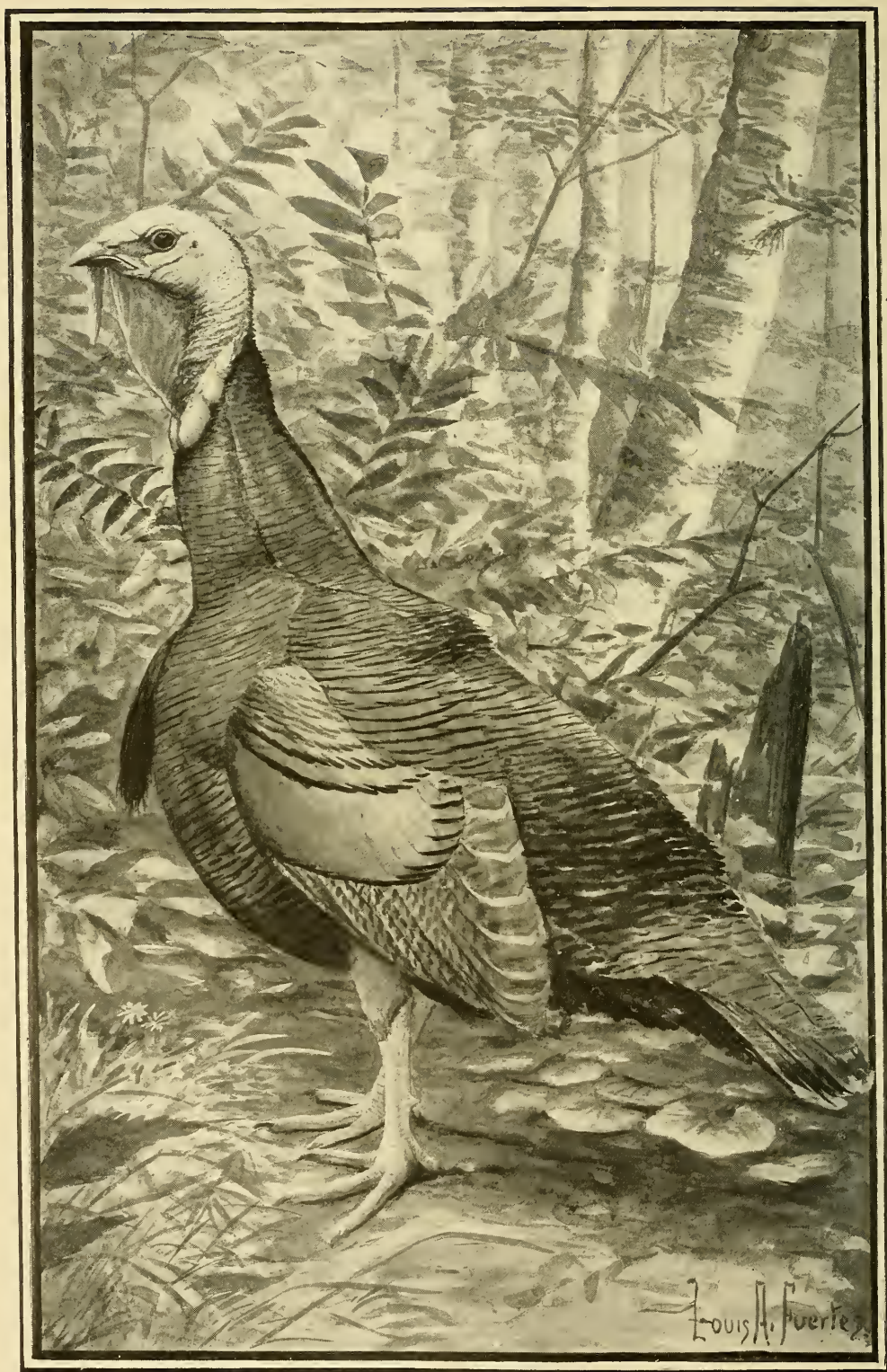
The male turkey is a thorough believer in polygamy—in fact he is a bad old Turk all through. During the mating season he struts and gobbles and shows off before admiring females, fights furiously with his pompous rivals, and generally plays the part of a devil of a fellow, but when it gets right down to housekeeping he shirks—goes to his woodland club where he meets other baldheaded reprobates like himself.

His sober-colored wives are humble and wise, and after a brief basking in his bullying favor they steal away to hatch their young in peace and quietness. The nest is simple, but most carefully concealed, for be it known that the royal male wouldn't hesitate to smash eggs any more than he would hesitate to brain young turkeys if they bothered him. The hen lays from seven to a dozen eggs; when more are found in one nest it is safe to infer that two hens have laid together, which occasionally happens. In such cases the two mothers share the sitting and the care of the joint brood.

The eggs are creamy white freckled with reddish brown. Should the first nest be destroyed the hen may lay a second set of eggs. When the laying has been completed the males leave the females, to rejoin the broods later in the year.

When the birds are plentiful, full-grown broods sometimes unite to form great flocks. I have seen forty-odd together.

There are several ways of circumventing the turkey some of which are hardly recognized in sport. I have even known men say "calling," *i. e.*, imitating the cry of the female during the mating season, was taking a mean advantage of an amorous gobbler; that to sing the syren song of love until the hot-headed lover was



THE KING OF AMERICAN BIRDS

within a few yards was questionable; but "calling," or "yelping," has its redeeming features, and, fairly considered, may be ranked as no mean test of one's knowledge of turkey ways and skill in imitating turkey talk. The calling—imitating the yelps—"yunk—yunk—yunk," is done by sucking air through a turkey bone, or, as I have done it, by using a new common clay pipe. The caller carefully conceals himself about dawn in a cover near which turkeys are "using," and as the gobblers make their presence heard, he sends forth a shyly suggestive response. His object is to persuade some fool gobbler that the fattest and prettiest hen in the whole country craveth an interview. The "personal column" would put it: "Would the large handsome gentleman with the bronze suit, the red neck and the superb baritone voice meet the soprano lady in gray walking suit, at the basswood stump—object a pleasant friendship and general good time?"

Would he? Well, ra-ather! Being like some men, he gobbles about it, puffs out his chest, struts around and keeps edging nearer and nearer to the stump. He distinctly sees the rendezvous, he distinctly hears the dulcet soprano, but he doesn't see or hear the evil-minded person who is hunched up behind that stump. He drops his wings and fans his tail for one more impressive strut and—the subsequent proceedings interest him no more!

This sounds very easy, but it is not every sportsman who can call so perfectly that the keen ear of the gobbler will fail to detect the cheat. A single false note may spoil the game, while a serious blunder will surely send the gobbler to cover with truly marvelous speed, and he will not return. The actual shooting is easy, for lost nerve is about the only excuse for missing with rifle or gun at such short range. In justice therefore to "calling," I may say that the skill necessary to deceive the bird, together with the wary patience required are sufficient to raise it above the level of downright pot-hunting.

Another method over which I have heard men rave, but which I have not followed, is coursing the turkey with greyhounds. This is a sport of the plains. The game is watched until it has wandered sufficiently far from cover, then the hounds are slipped and the sportsman fol-

lows on horseback. The turkey is rushed and compelled to fly further into the open, hounds and horseman keeping up a desperate chase. The first flight may be a rather long one, but the quarry is bound to tire. Before he can rest, he is again rushed and this time his flight is short. After a few of these breathless dashes the bird gives up and is secured—fairly run down. There is a hurricane dash about this which suggests rare good fun and it is not without the spice of danger, for a mistake on the part of the racing horse may mean a nasty cropper.

But the sport of sports with the turkey is tracking in the snow. It is difficult, frequently downright hard work, and it will test a man's woodcraft to the utmost. A shy old gobbler is harder to still-hunt than a buck, and of the twain I should consider the turkey the nobler quarry.

Turkey tracking in great woodlands, especially where the birds are few, is a blending of the unexpected with the might-have-been. The slightest miscalculation, or accident, may ruin one's chance for a day, while it is quite possible to follow a big gobbler from a wintry dawn to dusk and not obtain one fair chance at him.

Put a good man upon the trail of a flock in deep, damp snow, and it's odds on that he will kill his first bird within a few hours, and he may get three or four before dark. He will follow steadily, patiently, remorselessly wherever the tracks may lead. Should the flock flush from any cause, he will take the direction from the few long strides the game made before rising, and will push steadily on. Turkeys fly straight, and the tracks will be found again somewhere within a reasonable distance ahead. If he be cautious, the game is not likely to again take wing. In time the turkeys will become more or less weary and a single track will be found diverging from the main trail.

To the experienced the sign is plain. The turkey that made the single track is tired and has slipped off to hide. If the man has a shotgun he will follow the single track, if a rifle, he will keep on after the flock. The single bird will surely be crouched in some cover near where it left the flock, and it will almost certainly flush within close range and afford the shotgun a comparatively easy chance. After securing it, the man will

sling it over his back and again follow the flock until another diverging track is noted.

The man armed with a rifle pays no attention to the side tracks because the promised chance means a flying shot, or at the best a glimpse of the bird running at full speed. At either of these the rifle is practically useless, for a kill under such conditions would be merely a fluke. The rifleman therefore sticks to the trail of the flock, and if he is wise he will devote his closest attention to the biggest track. It is the mark of the old gobbler, the king of the lot, and the bird your true sportsman prefers to all others.

But the big gobbler is no easy game. He is the strongest and from his age and experience, the craftiest of them all and the man who walks him down will surely earn his prize. One after another wearied birds slip to one side, but the big track leads on through the roughest scrub and over ridge after ridge. The man slips after, like a shadow flitting from point to point, and with keen eyes ever searching the cover ahead.

After perhaps hours of cautious trailing, he suddenly sees a dark object zig-zagging between the trunks, then another and another. Perhaps four or five turkeys are still following their big leader, and most likely all of them are tired. Now comes the test of the man's nerve and skill with the rifle. The turkeys are perfectly aware that they are being followed. All unknown to the man, they have seen him half a dozen times during the long pursuit, and dark, keen eyes are watching the back track. The man seems to drift from tree to tree.

Presently a turkey mounts a snowy log and stands a black, sharply-defined figure of alertness. The man halts and the rifle comes to the ready. But the bird in sight is not *the* bird—it is only a small one. Another shows, and then another! They seem to appear in some marvelous manner in the very places which eager eyes have just searched. The mystery of the woods is in these dark, silent shapes. Still the man waits and stares, though the water is in his eyes and a muscle in a leg is cramping stubbornly.

At last, from nowhere, moves a black mass with nodding head and snaky neck, and it halts and stands bolt upright. The man knows right well what may happen

within one minute. A sudden sprint, a clapping of mottled wings, a crashing of brittle twigs, and perhaps (?) an emphatic "—— the luck!" That is all.

But it hasn't happened yet. Deliberately prompt, the rifle goes to the shoulder; the sights line truly upon the long, slim neck—or on the center of the big body if it must be so—a sharp report rips the solemn silence of the woods.

Yes! Yes—and then what?

Damn! know! You see, it's like this. If it's one of Cooper's marvel-manipulators at the south end of that rifle, there is a sudden stiffening of a grand bronze body, a clatter of wings as its fellows flee in terror, and a spurt of steaming life-blood upon the virgin snow—and that's all there's to it!

But, with *me* behind the gun—that is what you mean?

Oh! well, that's different. In that case there would be—"a sudden stiffening of a grand bronze body, a clatter of wings as its fellows flee in terror," a great crash as the bronze body took after its fellows, a spurt of steaming, bright blue Saxon speech from behind my tree, and an empty shell upon the virgin snow—and *that's* all there's to it!

Don't doubt me reader—a good man hates to be doubted and the hurt of a blow at one's truthfulness is long amending. So, because I know whereof I speak, I seldom hunt turkeys with a rifle!

But with the gun it is different, and while I know that when one carries a gun he is apt to wish he had a rifle and *vice versa*, I greatly prefer the gun. Most of my trailing has been done in heavily-wooded country, having here and there a marshy opening with big clumps of tangled brush, all of which meant flying shots at comparatively short range. A good twelve-gauge, plenty of powder and an ounce of big shot, should stop a running or flying bird as far as it can be clearly seen in such cover, or in any ordinary cover.

The gun should be held well ahead. A single heavy grain in the head or neck should mean a dead bird. A turkey, though hard hit farther back, may lead one a tedious chase before being secured, if it does not escape outright. A broken wing means trouble. A winged turkey, having its running gear still in

good order, is indeed an exasperating proposition. The only thing to do is to hustle after it hot foot and shoot at the first glimpse of the running quarry. Should this fail, keep right on as fast as possible and send in a shot every time a feather shows. The report will rattle the bird and keep it from selecting some secure hiding-place.

Of course, on tracking snow, the tracks can be followed, but if given time, a turkey will work its way into the most baffling cover and once there dodge about for hours without affording a chance. I once winged a grand gobbler at about mid-afternoon, and, after refusing one doubtful opportunity, chased that infernal fowl until dark and not only failed to secure it, but got myself so mixed up that only the distant whistle of a railroad engine gave me a line on civilization and saved me from sleeping out in the cold, grubless whence.

After one has emptied both barrels at a flying turkey it is a safe rule to follow that particular bird at least until its new track has been discovered and traced sufficiently far to warrant one in believing that no shot took effect. By not doing this I lost one of the finest gobblers I ever pulled on.

An incident of my last visit to the court of king gobbler may serve as an illustration of the ups and downs and the glorious uncertainty of turkey trailing.

Morning broke with a golden radiance which made one feel that it was good to be alive. A new white mantle of silver was spread over the world and every tree bore a feathery dressing. For a week sharp frosts had prevailed and Winter had set his iron grip upon all but steeply slanting water. The previous afternoon I had traveled to the small village in the woods. Twelve hours before, a gray sky had warned me; the message had been wired, and my short trip had ended amid the last scattering flakes of the promised snowfall.

True to previous agreement, "Joe" pulled me out in a gray half-light which he called morning. Everything looked favorable and within an hour we had entered the woods.

"It's three miles," said Joe, tersely, as he started his long, lean legs upon a route which might end the Lord knew where. As I knew him of old, I made no com-

ment. That a hard day was to come was a certainty—just how hard depended upon the luck. In any event, I suspected a certain individual would, like Wellington, be praying for night along about mid-afternoon.

Joe strode straight ahead as though treading pavement, and he had me glowing and breathing too fast for a smoke before his first halt.

"Thar's their range," he remarked as his hand performed a sweeping semicircle. Before us spread a huge opening—in summer a marsh with stretches of open water and big clumps of tall rushes, in winter a level plain of white with a soft mound here and there to indicate where the snowburied rushes stood. Wise people kept away from those mounds for reasons good—elsewhere the ice was strong and safe. Around it all stood the silent, unbroken forest, huge halted billows of bluish-gray crowned with a songless surf of glistening snow.

"Let's ring it," said Joe and away he went.

Now "ringing" it sounded easy but it wasn't. It meant the chasing of an iron man who had no soul, through apparently limitless woods, in and out of doubtful hollows and over snow-burdened logs till you were snow from fork to heels, and miles of this with no let-up. It meant raising the leading foot very high over a big log and twisting after it on the seat of one's corduroys and meanwhile finding that certain muscles had not been used that way for a long, long time. It also meant considerable muttered remarks which would melt snow if all applied to one spot.

But at last, mercifully! a change came. The old boy pulled up and pointed at the snow. A line of tracks, so fresh that the disturbed snow was yet settling, told the glad tidings. Four or five turkeys were only a short distance away, evidently from the trend of the trail, in a long snarl of thicket which bounded all one side of the open.

Now began the trailing in earnest. Twenty yards apart we stole forward, Joe on the trail with me steering by his course. For an hour we drifted ahead, silent, ever-ready, while eyes strove to bore holes in the shadows under every log and laden shrub. A red squirrel came out of his nest and the soft "prut" of the

falling snow he dislodged almost gave me heart-disease. Farther on a wad of snow fell through some dry leaves and the rustle of it nearly caused the pinching flat of my gun barrels in one fierce grip.

We went on, and continued going on. So did the turkeys—at least the tracks said they did.

At half-past two Joe halted, pushed up his cap and spat out a much-chewed cud. Then he passed the back of his hand across his mouth and stared sorrowfully at me. I, too, pushed back my cap, and as I did so a puff of steam rose from it.

"What time is it, Joe?" I gasped, for it seemed as though we had tramped for a week.

"'Bout two o'clock I reckon—we'd best eat," he replied.

We did eat, and then, as the meanest thing I could think of, I pulled out an empty flask and offered it to him.

A pained look came into his eyes, almost instantly followed by a blaze of keenest excitement. He was staring over my head as we sat facing and he evidently saw something, for his hands closed upon the rifle across his knees. I knew better than to move a hair, or ask fool questions, but as his eyes sought mine questioningly I winked suggestively. Slowly the rifle rose to the level till I could see into the muzzle. As slowly my head bent forward till my nose was almost in the snow and I heard a whispered—"All right."

How long he took to get the old gas-pipe where he wanted it I can only surmise—it seemed like time for spring plowing before he turned it loose. There was a jar—a small but intensely lively spark went far down my neck, then something fell over me, tramped me flat and went yelling into the woods. By the time I had picked myself up, a raving maniac was whirling something black around his head and shedding turkey feathers every jump. It was a big, fat hen, and Joe had chanced to see it light in a tree not fifty yards away. Great was his triumph, and not until I again solemnly proffered the empty flask did he return to earth. Then we tramped on feeling better, for it was a fine bird.

"What ye think?" he asked me later as the shadows began to pile in the thickets. My answer must have surprised him.

We were standing at the edge of the

marsh, and we were both pretty well cooked. It had been a hard day and only the one bit of luck had come our way. We both wanted to get home that night, but Joe, good fellow as he always was, had volunteered to try it next day if I so desired. As he spoke, I was looking rather ruefully down the long stretch of frozen marsh. We were almost at the point where the hunt had begun and with the light failing, it was useless to think of further work in the woods.

Without a word in response to his question, I made a leap upon the snowy ice and ran like a quarter horse across the open. The footing was fairly good and I trusted to luck that the ice was strong, for I was pounding it hard. Out of the tail of one eye I kept tabs on a moving black speck—a something I had seen fly into the open a good four hundred yards away.

Joe's quick grasp of things proved invaluable. One sweeping glance had told him what was up, and now he was coaching like the past-master he was.

"Run, goldarn ye, *run!* I'll tell ye when to stop!" he roared, and I heard and sprinted for dear life. "Whoa! Yer furr-nuff-rite-top-ye!" he howled in an agony of excitement, and I stiffened my legs and slid plowing snow for ten feet.

Puffing, twitching all over, I turned my head. Joe had timed it marvelously well. Barely twenty yards away was a noble gobbler just stretching his long legs to alight. I saw the huge speckled fans working convulsively, the gleam of the bronze, the drooping tassel, the snaky neck and all. I should have taken my time, let him get running smoothly and then cut the head off him as he ran.

I didn't. I just belted it to him any old place, hustled in the second barrel at the center of the feather storm-vortex, rushed in another shell—then ran and jumped on him as hard as I could, and wished I could land on him twice as hard—that's what I did!

As it happened I had hit him in the head, but it wasn't my fault! The second barrel scored him promiscuously, but in spite of the storm of big shot, he was a truly grand bird.

When I dared get off him, I said he weighed twenty pounds. Joe said twenty-five. Before I had packed him a mile I said fifty.

STAG AND WOLF HUNTING IN FRANCE

By Vance Thompson



HERE is a theory abroad that the Frenchman, because he can dance and turn a compliment, can neither ride straight nor shoot clean. Of

course, this is merely an international prejudice. Dull people will go on believing that all Englishmen beat their wives and all Yankees chew tobacco, and not even the comic papers can change their way of thinking. Mr. Pickwick's friends were English sportsmen—of a kind; Tartarin and the cap-shooters of Tarascon were French sportsmen—of the same kind; but neither Dickens nor Daudet are very good authorities on the hunting of big game.

I have seen the London cockneys, armed to the teeth, trailed by dogs, shooting sparrows in the calm Surrey fields. My first shooting experience in France was about as stirring. It was years ago—more years than either you or I would care to reckon—when I was taking my first tramp through this pleasant land of France. One afternoon I was loitering at a little village north of Marseilles, waiting for the diligence—a yellow-bellied post-wagon—that was to carry me on my way. In front of the post-house were a few spindling and leafless trees, where the thrushes—the *grives* of the Midi—fluttered disconsolately. As I waited there, down the country road came two sturdy, black-bearded fellows with shotguns. The master of the post hailed them rapturously and fetched his gun, an old center-fire of that first year of 1862. Three thrushes had settled on the naked tree; each "sportsman" selected his bird, and, at the "One—two—three!" fired. One bird fell to the gun of 1862. The master of the post shouted with triumphant glee, opened the door of the house and whistled. There trotted out a little half-breed King Charles spaniel.

"*Rapportez!*"

Wagging his bushy tail the dog crossed the road and retrieved the game.

For many a year I jeered, as Daudet

did, at these heroic sportsmen of the South, but after a while I discovered that Le Piste was not France, and that there is shooting and shooting.

There are in France forests that spread for leagues, wooded uplands and lean stretches of mountain land, where you may still find the stag and the roebuck, the wild boar, the wolf, and—now and then—the wildcat.

Of course, you may do better in the Tyrol, but in one respect *la chasse* in France is unsurpassed. Here it is, and only here, that the stag-hunt preserves its old dare-devil gaiety and the ceremony that lent it charm in the chivalric days of the long ago. I have hunted the deer in Germany, and have seen the Queen's staghounds loosed on the tame deer of Windsor; but until a notable day this year I did not know what *la grande chasse* meant. Before describing that golden day when an old stag, adept in wickedness, saved himself by driving out along the line of his own running a *daguet* (that is, a green two-year-old) let me give you a few preliminary and necessary details.

In France the stag is hunted. The man who shot a stag would find far less mercy than he who shot a peasant. One hunts him from afar, and may have many a good run without having seen the tip of an antler—the chase, after all, is the thing.

The hounds differ greatly in various parts of the country. The big white hounds of Vendée, the long-headed, black and white hounds of Gascony, the yellow and white hounds of Artois, all have their lovers; but the best packs—for instance, those of the Duchess d'Uzes and the Baron de Vaux—are cross-bred from the Saintonge and the foxhound.

For fifty years now this *bastarde de Saintonge* has been bred in France. Taller, slighter, deeper in the chest and better muscled than the English hound, he has retained the fine scent, the love for the hunt, and, indeed, all the good qualities, moral and physical, of his French ancestors. Other good crosses have been made,

notably that of the Gascon hound and the bloodhound (St. Hubert), but nothing quite equals these nervous but patient, big but quick, bastards of Saintonge, clean black and white, with mouths like bells.

As to the horses—well, no two men have ever agreed on a definite type of a good hunter. In France, no more than in England, is there a generic type. An Irish hunter is pretty good everywhere, and not first-rate anywhere. He seems to have no especial preference for the kind of country he is sent over. Of course, he is found—with his equally indifferent brother from Hungary—everywhere in France. Still, in the best French hunting stables you will find the thoroughbred, or half-blood, that has been trained for only his own kind of country. It is the theory of the “shoemaker to his last,” admirable in matters of sport as in all others.

There were about forty guests at the château that day. The *veneur* had been out early in the morning with two of his oldest dogs and started a stag; after following him for a short distance, he called

There are two stables, one for the postilion and carriage horses; the other for the hunters. The hunting stables form a quadrangle round a huge courtyard which is roofed over with glass; the stable doors are of mahogany, with panels of beveled plate-glass; the interior fittings of mahogany and white marble.

The huntsmen were all in the livery of the hunt, blue, magenta and cream buff, and carried French horns. There were a number of ladies who drove to the meet in light wagons.

It was nine o'clock when we set out, and there was a six-mile ride, first along a white road and then through the forest, before we came to the place whence the *veneur* had stalked the stag three hours before.

We hunted with two instead of the three traditional packs of hounds, and the relays of horses were sent on with the second pack. Six hounds were loosed first, among them two old limehounds that had started the stag. The scent was cold, but at last they took it and went off, followed by the head huntsman.

Grouped in a little cross-roads of the forest we waited. Suddenly one of the dogs gave tongue; then another and another—“*Ils parlent! Ils parlent!*” and always we waited for the horn of Jean the *pi-queur*—the whipper-in—who was with them. We listened for the notes of the “*lancé*” or the “*bien-allé*”—the old “he’s off, well off!” that stirs the blood like a toxic drug. Nothing; a young dog or two shouting his folly; the women whispering their excitement; the clink of bridle-bits—the huntsmen had spread far and wide, half-circling the wood.

Suddenly far to the left a huntsman sounded the *Vue*—

he had sighted the stag, and the brisk fanfare he blew through his French horn told us it was a *dix-cors*, doubtless the one old Jean had started at dawn. In a few moments the hounds were brought up coupled, the young dogs yelping with excitement. A fine pack, bastards of Saintonge, all aquiver from their big black ears to their pointed tails, leashed two and two. Well-trained, well under the whip,



Vue !

off the hounds and came back to the château. This was at eight o'clock. He reported that he had started a *dix-cors*, that is, a ten-antlered stag, seven or eight years old.

By this time we had breakfasted—a hunter's breakfast with meat and wine—and had gathered in the courtyard. The stabling at the Château des Vaux, as everything else, is on a princely scale.

they waited, although half-mad to go until the last couple was unleashed and the master dropped his whip, with "*a la voie, mes beaux!*" when they scattered to left and right.

Far to the right the old limehounds were giving tongue, and so the hunt started; the dim, green forest echoing to the baying of the dogs, the cries of the ladies, the swift rush of the horses, and, here and there, the triumphant horns pealing the Marquis de Dampierre's fanfare for the stag of ten antlers. Nor did I know until that day how profound a love for music your deer has. At the sound of the horn, old hunters say, he throws up his head and listens; then, if he hears the far-off baying of the hounds, he tears himself away, but he goes slowly, divided between love of music and fear of the pack.

He was old and ruse, this stag of ours; no trick of the woods was alien to him; he knew how to double like a fox, and running water did not deceive him in his speed. He took us twenty miles. None save the head huntsman had caught a glimpse of him, had seen him, as the saying is, *par corps*. But all of us had seen him *par le pied*. We had got down on all fours to study his pear-shaped hoof-marks, that never overlapped, as might have been the case with a younger deer.

Twenty miles; and the head huntsman began to puzzle over the tracks; side by side with the *dix-cors*' sharp trail were the rounder, lighter hoof-prints of a two-year-old, or perhaps a *hère*. Always the dogs went on and the hunt swept on, for getting on all fours to study the turf is not stag hunting.

By the time we came round to the relay of horses and hounds many a horse was winded, and the women and young dogs had trailed off somewhere in the back-ground.

Another mile brought us out by a little stream. For a moment the hounds fumbled. Had he taken to the water? Had he gone up stream or down? Had he crossed? Suddenly the pack sets off in full cry, along the water's edge for a few yards, then at a tangent through the woods, and out into a field rough with the stubble of wheat.

Then again the horns sounded the *Vue*. He, the deer, was black, wet, panting, and going heavily, head down and back

humped up as though he were carrying a hod; and always, his little tail quivering with a sort of nervous excitement that seemed in strange contrast to his dull going. He labored heavily across the open country; evidently he was making for a bend of the river to die in water as a stag should. But the fresh hounds, they had



Typical French Hound.

made scarcely seven miles, were hard on him. He threw himself down for a few moments. Then he staggered on, only to fall again.

And now the horns were sounding the *hallali*, the bravest music that ever rang out over a hunting field; the stag, as though he knew the time had come to die, got to his feet and faced the on-coming hounds. He stood square, his four legs straight; he tossed up his head and waited—for he's a proud fellow, your stag, and dies with his head up and his eye on his enemies. Were it not that his sides beat thick and fast he might have been the bronze statue of a stag. The hounds circled him, yelping; finally one of them leaped at his fore-legs. The stag broke through the circle, ran a few yards, stopped again and faced.

The hunters were bringing their horses over the clotted ground as best they could. The head huntsman and the master of the hunt—a marquis, white-bearded and old, but the straightest rider and the keenest sportsman in France—arrived just as the hounds, mad now and beyond control of the voice—were attacking him on all sides. The old marquis leaped from his horse to give the death-blow to the quarry.

We all approached on foot. The hounds were growling now; the horns kept up their savage clamor of the *hallali*; the stag waited—watchful, and, I like to

think, contemptuous of death, as well as of the little creatures who had hunted him down—and as he stood there, the marquis leaped through the circle of hounds, hamstrung him, and, not a second later, drove a hunting knife into his heart. The only sound the stag made was a gritting of the teeth—as he ground his jaws together in rage.

For a moment the dogs were allowed to mouth the stag; then they were leashed, and we had a chance to examine our quarry. A *dix-cors*?—no, not even a *dix-cors jeunement*; we had run down a *daguet*, that is, a two-year-old. And how had this happened? The head huntsman had his own theory; it was this: the old stag that we had started in the morning had led us the first fifteen miles, it may be; then he had started up this two-year-old and forced him to follow along the line of his running; miles of this double running had confused the hounds, and when upon coming to the river the old stag took the water, while the young one was bullied into running on, the hounds had naturally followed the only trail there was—that of the young stag. This was the *veneur's* theory, but the marquis said more wisely: "We have brought down a noble stag—evidently he gave up his life of his own free will, in order to save Monseigneur *Dix-cors*, who may have been his father."

"Or his uncle," said the nephew of the marquis; and with that we rode home.

From the meet to the kill we had covered twenty-seven miles, and we were fifteen miles from the château. We reached there in time to play a game of billiards—or chat with the women—before dressing for dinner; and, by the way, both in the billiard-room, the lounging-rooms and dining-hall, all the electric lights and wax candles were fixed in brackets or candelabra made of antlers; it was the "Château de Sport."

The ladies came down to dinner wearing the colors of the hunt, and the talk was all of horses' legs and hounds' noses, of the tracks of the *daguet* and the *dix-cors*, and the vengeance that should be taken upon a certain peasant, named Mathurin, who had strung a wire fence across a nasty corner.

After dinner there were billiards again and much talk, and old hunting songs sung and dancing.

At ten o'clock a blast from the French horns announced the last ceremony of the hunt—*la curée*. There are two kinds of *curées*, the warm, which takes place directly after the stag is killed, and the cold, which I am about to describe.

We descended then into one of the stable-yards, round which stood a score of lackeys with lighted torches. The huntsmen, who were expert on the horn, played the famous calls, appropriate to the moment—the "*Veneurs de France*," the "*Curée D'Orleans*," the "*Bien Chasseé*," and many another joyous lilt of the hunt. The perfumed women in the flare of the torches looked prettier than women ever look by daylight.

We could hear the horses whinnying in the mahogany stables, and the dogs, both packs of them, yelping and howling in the kennels to the left.

By the light of the torches we could see a black mass lying in the middle of the courtyard. This was the offal of the stag covered with the skin, the head and antlers resting on top. There was a moment's silence; then one of the huntsmen stepped forward and blew the triplicate bugle notes of the "*Honneurs du Pied*"; and even as he blew, two lackeys came forward, each with one of the stag's forefeet on a silver salver. These were presented to the honored guests; a young count who had just come of age—and into his own—being one recipient, and I, as a foreigner, the other.

With this all the horns blared in chorus; the lackeys pocketing their tips of a louis apiece drew back and the hounds were loosed into the stable-yard. One of the huntsmen swung the head and antlers to and fro, adding to the wild excitement of the hounds and giving the buglers another occasion for waking the echoes. For a moment the din was tremendous. Then abruptly the horns were silenced and the skin was dragged away. It was a signal the hounds understood. They fell upon the offal and dined upon what they had chased. It was the end of the *curée*; the end of the day's hunt—all save the dance in the great hall, the gossip on the balconies, or the toddy in the billiard-room.

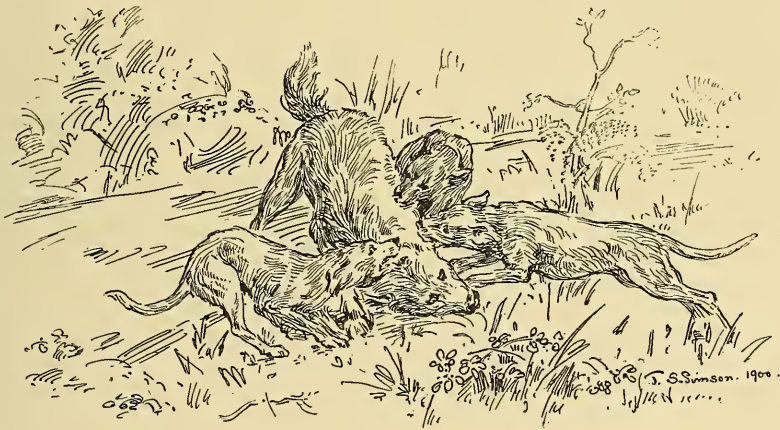
Whether you take your stag in the east of France or in the center—I do not know anything except by hearsay of the north—you have had a good day's work and a

good day's sport. This pacha of the forest runs well and stands well at bay; the country is pleasantly diversified, the forests are open, the hedges are not tricky, and the man who rides at 196 pounds may do very well with two horses. The run from meet to kill is usually between thirty and forty miles, though a stag started in the forest of the Duchesse D'Uzès in the Seine-et-Oise, not long ago, led for seventy-two miles before it took water and was brought down in the *étang de Holland*.

Of course, the sport one has depends largely on the country to be got over, but it seems to me there is something in French stag-hunting a trifle more exhilarating than the English game of hunting a flea-bitten fox across Leicestershire farm-

tusks than his tamer brother of Germany. Indeed, here in these Gallic lands was his original habitat. The long-haired Gauls, who went to fight Cæsar, carried the boar's head spiked on a lance—it was at once their flag and symbol. Nor since those days has there ever been a time when the man (who had money) could not chase what Louis XI. called the "savage pork." I have mentioned the matter of money because the cost is tremendous. In these days only the Russian Grand Dukes, James Gordon Bennett, international bankers and a few declassified "countesses" can afford to go in for this royal sport.

In the first place, the wild boar here is really wild—not the half-tamed creature of the Saxon preserves; and, secondly,



The Death.

lands. And then it has a little of the lordly air—it calls back the purple days when the magnificent Louis went out with hound and horn to hunt these antique forests. It may be there is something theatrical in the stag-hunt; it is the sport of kings, and one expects with it more than the due measure of lime-light and orchestra. The pacha of the forest is hunted down with as much ceremony as accompanied the heretic hunts of the days of the Crusades.

There is another fellow in the French woods, however, a seigneur of importance—this *messire Sanglier*, as they call him here.

He is a big fellow, the wild boar of France, longer in the leg and better

the necessary equipage of men and dogs would deplete the purse of any one except a millionaire, though, of course, certain peasants, armed only with home-made spears, heeled only by cur-bred dogs, bring down many a boar, for this hairy lord of the uplands is unprotected by the game laws of France.

An equipage such as that provided by Mr. Gordon Bennett for the Grand Dukes of Russia, cost at least \$100,000 for the fortnight. For instance, there were from seventy to eighty hounds unleashed every day, and after the hunt there were taken back to the kennels at least twenty ill or wounded hounds, for the wild boar is kin to the extraordinary Englishman who got himself known as "Jack the Ripper."

Then the pace is killing on horses as well as dogs. A *ragot*, that is, a boar of three years old, will wear out several relays of dogs and horses before he turns, and even then he will probably make three kills for each of his tusks. In the last big boar-hunt in the forest of Ecouves, which is about ten thousand acres in extent, thirty-five boars were got, nearly one hundred dogs went down, three men were badly hurt and the cost in horseflesh could hardly be counted.

The boar-hunt begins at dawn, for the boar is an early riser; in fact, he is the first creature abroad in the woods. Then he is a nomad. He sleeps usually twenty miles away from where he breakfasts. A good *piqueur* is sent out before daylight to search the windward side of the forest; he searches especially the thickets where the boar may have lain or rooted; then, with an old limehound, he goes out on the trail. It is easy enough to tell the traces. The grown male, for instance, places the hind foot exactly where the front has fallen; the young boar steps short, while the female steps wide.

The boar gets his growth at two years, but, of course, the best sport is to bring down a *grand vieux sanglier*, that is, a "solitary," with two finger-lengths of tusks. He is old and wicked, this solitary; he wanders alone in the forest, and, it is said, he kills the females of his own kind, if they approach him; he runs well, and it is only after seven or eight hours of the chase that he gives head to the dogs.

The climax is when the boar turns. He is so well armed that the man who has a thrifty care for his hounds should be close at their heels. Expert as he may be, the hunter who can drive his spear into the boar's shoulder before a few of the pack have been ripped up or disabled, is a clever man; and if he brings off himself and his mount with unslashed skins he is by no means a novice.

Last January, the Comte du Temple, a former Deputy, an old soldier of the war of 1870, and a sportsman who has shot big game over half the world, invited me down for the boar-hunt he had organized in the forest of Orléans. Grim, little incidental duties interfered with that jaunt, but when I saw Monsieur Du Temple a few months later he told me the story of the killing of the *pigache*, that is—for it

is only fair to interpret this French hunting slang—the cross-toed boar.

He was a big brute, over his seventh year, and had led them—or, rather, dodged them—for seven hours. They were going with the third relay of twenty hounds—Gascony hounds, blue or white with wine-colored spots, very fast, patient, rough-voiced and heavy flanked, but full of the dash and flourish that you only get in these old French races. It was twilight; they came upon the boar in a nasty thicket, where a stream cut the edge of the forest. The hounds circled, yelping; now and then making a dash. The boar came out slowly; he stood for a moment rubbing his back against a tree-stem and paid no heed to the dogs, though they ran at him bravely enough.

Monsieur Du Temple, spurring up, was twenty yards away when the *pigache* saw him. For perhaps a second he stood scratching his back; then, with a queer little grunt, he shot straight for horse and rider. In the forest of Orléans they shoot the boar. Monsieur Du Temple had a hammerless twelve-caliber pistol, which must have made it interesting. When the boar was within two yards he fired, aiming along the spinal-column. He thought he had missed, for the boar ripped his mount on the right shoulder, and man and horse went down.

When Monsieur Du Temple got to his feet he dragged up the Irish hunter, but the wild pig lay dead; he was probably dead, though he didn't know it, when he charged. That must have been a moment worth living; as I heard Monsieur du Temple describe it—it was in a quiet little den in Auteuil—I felt that I had been cheated of a pleasure that should have been mine.

And now one word of the wolf hunting in France. There are two kinds of wolf hunting—the chase and the *battue*. I have never hunted the wolf with horse and hounds in France, though my friends say it is the finest sport in the world, and the fact that the army officers go in for it so keenly is evidence enough; but I do know something about the *battue*.

It was in the West of France; there was an upland, nasty with rocky fissures that led up to a scraggly wood that had been timbered the year before; there was an inch and a half of snow on the ground, already soft, though the sun was hardly

over the tree-tops as we ascended the hill. There were three guns and about fifty men.

The *directeur* of the hunt had had his men out since midnight, and they had seen the tracks of four wolves—a three-year-old male, a female (they knew her by the fact that the entry to the den was warm—what a compliment is there, oh, my brothers, to the sex!) and two cubs.

Long before dawn they had split the woods in two in order to isolate the wolf. The she-wolf did not break cover; she stayed, probably, with her cubs. The wolf was isolated in a half of the woods, round which were ranged some forty tatterdemalion men with trumpets, horns, copper pans and—knives. They carried knives, these brave men, because they did not want to die for forty cents a day without making a fight for it.

It was not yet six o'clock when we, who were the three guns, came up. Somewhere in that four-acred square the wolf stood, sniffing the wind, in quiet. The morning air brought to his nostrils the sickening odor of that thing called man. Ferret and squirrel and bird, all sensing the same inquietude, hushed themselves or fled.

The wolf waited; his mind was busy with many things. Suddenly our host whistled the three calls that for years have meant "Wolf's here! wolf's here!" and the fifty ragged men, round three sides of the wood, began to clatter their copper

pans and blow their tin trumpets and shout "*V'loo! v'loo!*"

The she-wolf shuddered down in her den, hushing her cubs and panting; but he—the rusty fellow—with eyes red with fear and rage—broke toward the free side of the square; and there stood three men with guns.

He came out running loose and long—a dirty, rusty, brown thing, that stepped swift and silent among the tree stems. And when three guns had brought him down, we shouted our triumph to the morning air. But somewhere, huddled in the furze and rocks of her cave, a she-wolf lay and debated about God's providence and said things and got no answer.

Hunting in France; it is an old, old sport; its atavistic roots go back to the days when the Gauls and their blonde she-beasts threw whetted stones in these woods. The generations of men have come and gone; always the wolf and the wild boar, the deer and the roebuck have kept them company. It will be many a day yet before man has made this a wilderness of civilization where only he can live.

I am writing these words in the forest of Rambouillet; to right and left of me President Loubet and his merry guests are potting hares and pheasants, even as Louis XIV. and Napoleon did here in the long ago; they are a little like Mr. Pickwick's friends—a little like Tartarin of Tarascon; but all the same, my brothers, there is big game in France.



THE POLO OF THE ANCIENTS

By John Tyler

IT is not my intention to inflict a history of polo upon OUTING's readers, yet just a backward glance of one thousand years, when already the game flourished, may not be unacceptable to the sportsmen of to-day. Polo probably has the longest history of any of our games, if we exclude archery, which was always rather a method of filling the larder and a military exercise, than a sport in the modern sense. Polo, on the other hand, from even the earliest references to it in Persian traditions, which carry it back to centuries antedating the Christian era, was always what it is to-day, an exhibition of skill in horsemanship and a game.

It was so popular in Persia that it not only survived the downfall of that nation by the Mohammedans, but it mastered the conquerors and became with them as great a passion as it had been with the conquered.

Indeed, we owe our knowledge of the game to this very fact, for it was the Mohammedans who carried polo with them on their onward sweep through Afghanistan and into India, where it flourished in the hardy north and was there found and adopted by the officers of the British army.

From the Indian hill camp of the British it traveled some thirty years ago with the returning cavalry regiments which had learned to value it, to England, and thence as everybody knows it crossed the Atlantic to us.

Whether the earliest traditions had, or had not, a basis of fact may be left to be determined by the antiquarians. It is sufficiently well-established for everyday people that it was a much-honored game a thousand years ago. A Persian writer who died nine centuries ago calls it "The Game of Kings" (anticipating the claim of our modern fox hunters).

The implements of the game in ancient times differed somewhat from those now in use. The *Chowgân*, or crooked club or stick, resembled rather that used in hockey than the polo mallet of the present game. The *gooe* or ball was made of

wood and considered a very dangerous missile, when played by expert horsemen.

The playing rules observed must have been few and simple; none were ever reduced to a written code, even in later times. The first pitch of the ball was always the right of the highest in rank in the field, if the king, then he, but in his absence, then his son or whoever was in command of the games. If a guest of sufficient dignity were present and took part in the contest, the first ball would as a compliment be conceded to him. The greatest enthusiasm and rivalry characterized the play, and these constituted its source as well as its claim to honorable notice and reward.

In giving it patronage and encouragement by example and bestowal of rank, the kings preserved an ardent martial spirit amongst their immediate friends and followers; and it is not improbable that many expeditions, whether ending successfully or disastrously were due to the excitement or ambition inspired by this game. For some reason or other not altogether apparent, polo is no longer the National game of the Persians; indeed, it is never played by the natives.

I will now give extracts from the works of two Persian writers of great authority and antiquity, believing that to poloists of to-day they will be of sufficient interest to justify it. About nine hundred years ago a king of Ghilan, anxious for the prosperity and happiness of his son, presented him with a series of addresses for the regulation of his general behavior when he should succeed to the throne. They are models of good sense and apt illustration and are deserving of as much attention at the present day as when they were written. The son's reign was a short one, and fell on troublous times; and it is to be feared that he did not profit by the advice of his father as he ought to have done, in the administration of his affairs. One of the addresses, here rendered into English, is entitled "How to Play *Chowgân* or Polo."

"Thou must not get into the habit of rushing after the ball where the contest

is going on, for many serious accidents have happened to players during the game. A story is told of Omar Valis, who, it is said, had only one eye, but who was appointed to the government of Khordesān. On one occasion he went on to the field to take part in a game of polo. Curiously enough he had as commander of his forces a noble by name Azhar Khar. As it chanced Azhar Khar happened to come

on to the field just at this time, and at once ran up and laid hold of Omar Valis' horse, and cried out, 'I will not allow you to play the ball.' Omar indignantly replied, 'What! shall you be allowed to play and I refused?' Azhar gave answer, 'Yes! why not? For have we not two eyes, so that if one be injured by the ball, shall we be blind whilst we have one left? You have now only one eye, and if by chance the ball hit this one, you will have to bid farewell to

your government of Khordesān.' Then Omar rejoined, 'Notwithstanding the resemblance of thy character to that of thy namesake, thou hast well said, and I agree with you, and so long as I live I will never enter the lists again.' But thou, my son, mayest indulge thy desire once or twice a year, but not when there are many horsemen engaged, for then there are many risks of

collisions and accidents. Not more than eight horsemen, at one time, should compete in the game. Thou shouldst take up thy position of observation at one end of the field, and someone else at the other, and six players in the middle of the arena should take up the contest. When the ball cometh towards thee, thou shouldst strike it back on to the players and gallop your horse up the field, but be careful not

to enter the rush and excitement of the play, so mayest thou not only be free from danger, but wilt have had thy enjoyment and recreation. Such is the game of polo when played by personages of great dignity."

The following description of a game is taken from the celebrated "Shah Nameh," one of the longest poems ever written, the work of the great Epic poet Ferdousee. The game is related as an incident in the tragic career of a vir-

tuous and highly accomplished young prince, Siavush, the son of Kai Kaoos, King of Persia, and took place at Balkh, the capital of Turan or Turkestan. Afrasiab, the ruler at that time, was one of the most powerful antagonists Persia ever had. The prince had arrived at the Court of the King. He had apparently made a very favorable impression and was received with great distinction and kindness.



From an Ancient Persian MS.

The Presentation of Shah Nameh.

One evening the King, who had received Siavush in audience, proposed that they should repair on the morrow to the course where the sports were wont to be held, and give up the day to games and enjoyment. "I hear," said the King, "that thou art an expert player at polo, and that even the bravest hesitate to enter the lists against thee." This flattering though probably just eulogy of the young prince elicited the truly Oriental response: "May thou, O King, be richly blest, may the tribulations of the earth be far from thee and those who seek will find in thee an honorable ruler and worthy to lead any enterprise. When thou appearest my day is radiant and full of joy and from thee only shall I look for the decrees of fate. Thou art the glory of Homâi [a Persian queen or bird, possibly the phoenix] and the splendor of the throne, the crown of the Kaianians and the strength of the army."

The first streaks of day had scarcely pierced the parting shadows of the east, when the city quivered with the joy of prancing studs and mail-clad warriors. Soon the King rode out toward the field and excitement and mirth sat on the shoulders of each illustrious chieftain and eager competitor. The King, as soon as the forces had taken up their position, gave command that he and the prince should in the first contest take opposite sides, and that they would make an equal division of those who were proficient in the game. On this the prince apologized and protested that he was quite ignorant of the game, and that he would not dare to enter as an opponent of the King. "Thou must choose another more worthy of thy great reputation, for are not all here thy friends and dependents, and in this grand field we are thy obedient followers and supporters."

The King was delighted at this frank confession of loyalty, and declared that the accusations which had been brought against the young man "were as baseless as the wind of the desert." "I swear," said the King, "by the head and soul of King Kaoos that thou shalt lead on the opposite side of the field and show the players what thou canst do, and know why thou hast been chosen, and so give thee the reward of answering applause and make every face to blossom with smiles." The prince

yielded a willing submission and said: "The command is with thee, O King. Players, arena and instruments of the game are all thine."

The King chose the players from both sides, from amongst the great chieftains and warriors of his own countrymen, but the prince saw that this selection would place him in a position of utter dependence on his own skill and prowess, for he could not expect that his own followers would contest the ball with the King, and he would be a leader without any support. "If I come," said he, "to fulfil the high behest of the King, I humbly pray that I may be permitted to bring a contingent of Persians on to the field, who shall be my partners in contesting the game and there will then really be opposite sides in the play." The King admitted the strength of these remarks and assented to the new arrangement of forces for the contest. The prince chose seven men from his Persian escort, all of whom had been trained to this martial game.

"When all was in readiness there burst forth a mighty thunder roll of trumpets and drums, and the dust sprang as a cloudy whirlwind up to the very vault of heaven. If thou hadst heard the roaring blast of brazen instrument and gleaming cymbals, thou wouldst have said that the field had leaped from its place.

"As the ball was pitched into the royal arena the pealing shouts of the combatants in one rush of sound assailed the moon. The King dealt the first blow at the ball and in obedience to the royal hand it bounded through the clouds. The prince now girt up his loins for the conflict, and turned his steed toward the arena of contest; and as the ball was descending, but ere it reached the earth, he struck it with giant force and without more ado it was lost to the sight of man.

"Whilst excitement was glowing with intense fervor the King commanded them to present the next ball to the prince. As one who had chanced to meet an old friend, he pressed the ball to his bosom and kissed its rounded cheeks. Then amid the bellowing and clash of trumpet and high-sounding drum, the prince mounted his restless horse and for a few moments twirled the ball in his hand, then throwing it down, with one blow of his mallet it entered the spheres unknown—

may thou wouldst have said the glowing vault of heaven had snatched it upward.

"In this moment of refined exultation he alone seemed to comprehend the circumstances of the astonished and quaking field, and his face beamed with smiles. When the King beheld the fate of the ball, laughter overcame him, which aroused the great champions as from a distractive dream; and with one consent they cried out that never had the eye seen such a rider, nor had saddle held before such an amazing warrior. 'Only such,' said the illustrious King, 'as have the help of the Most High are equal to feats like this we have just seen'; and all agreed that in dignity, prudence and virtue he excelled all that report had said of him."

This was the climax of the day's sports, and the King withdrew from the game. "On the margin of the field a canopy of royal state was set up and the King sat thereon. The prince then came forward and was bade to sit down beside him, and the King was made happy by his presence. The King then cried out to his captains, 'O ye who seek fame, go now and take possession of the field and the implements, all of which are yours.'"

The arena was soon again the scene of the wildest animation and both sides entered into the game with such enthusiasm, that the "dust piled up cloud upon cloud until the eye of day was completely obscured." From either side there poured forth such a torrent of shouting that made

the ears deaf and the ball flew back and forth until at last the game fell to the Persians.

Again the Turks mustered their forces, and strove with might and main to carry the tantalizing little globe to its goal, but the Persians were always the victors. On seeing the Turks collect for consultation the prince was grieved at the behavior of his followers, and he called them together and admonished them saying, "The field is either a game of friendly rivalry or a real battle for hostile domination; in the one case it behooves us to be generous,

but in the other we are subject to the arbitration of fate. When you enter the arena be not over-earnest in the contest, and let the Turks occasionally carry off the ball."

After this the Persians left their minds to rove at will and did not excite their horses in the game, and when their opponents had once carried off the ball their spirits were revived.

When the shouts of triumph reached the ears of the King, he knew what illustrious champion had intervened and he exclaimed: "In him we have a sympathizing friend, and such another as he the world does not contain. In chest and locks and shoulders, and the use of the bow and arrow he stands without a peer."

Here the account of the game ends, but in continuation of his success the prince showed what complete control he had over the capabilities of the bow and arrow and proved his marksmanship was also superior to all others.



From an Ancient Persian MS.

Persian Polo in the Eleventh Century.

"OOM PAUL"

A MIGHTY HUNTER

By Howard C. Hillegas

AUTHOR OF "THE BOERS IN WAR," ETC.

WHEN Paul Kruger, the "Oom Paul" of the Boers, was a young man there were no sportsmen in South Africa, but every man was a hunter. At that time the country was as much a game paradise as East Africa is now, and the Boer settlers were obliged to be adept in the use of firearms in order to protect themselves and their families against the attacks and depredations of wild animals, as well as to secure replenishment for their larders.

The huge trekking-parties which were accustomed to go into the wild north every year were not actuated by the sportsmen's motives; they wanted to kill the marauding lion and elephant and to secure a year's supply of meat for "biltong," and hides for harness, shoes and "sjambok."

Biltong was the sun-cured flesh upon which they subsisted, and the sjambok was the dried hide of the rhinoceros and giraffe.

It was as a hunter and not as a sportsman that Paul Kruger gained a reputation among his countrymen—a reputation that was as great as that which he made afterward in the arts of statesmanship, diplomacy and war.

As a frontiersman, with the care of a family and thousands of cattle devolving

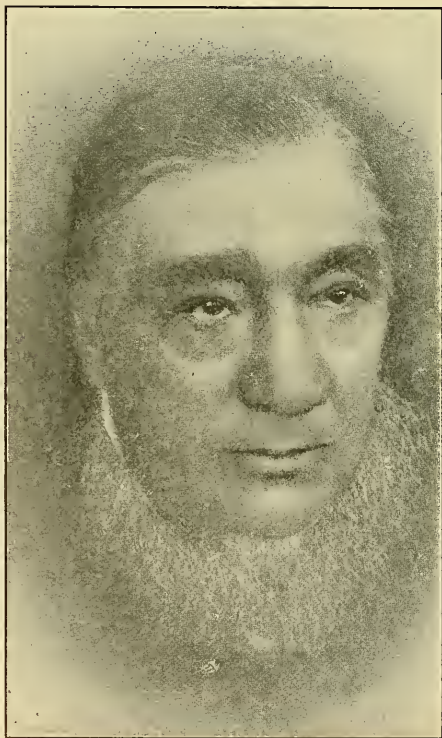
upon him, Kruger had few opportunities and probably no inclination to seek game merely for the sport which it afforded.

When he shouldered his gun it was because lions were harassing his camp or because there was a scarcity of food. Necessity made him a hunter, and his adaptability, his experience and his knowledge of the country and the habits of game caused him to become noted as one of the best in South Africa at a time when such a title had more significance than it has now.

Kruger's game-killing career began when he was one of the "Voor-trekkers" who migrated from Cape Colony into the then unknown interior. In the five succeeding years as this great party of Boers was wandering over the mountains and veldt in search of a permanent home, young

Kruger had many opportunities for shooting game, and early he gained a reputation as a deer-stalker. On this long journey, which finally brought the party to the present Transvaal, Kruger shot no less than fifty lions, according to his own statement to me.

Several instances of his prowess on this trip are well-authenticated and are as widely quoted among his people as the Washington cherry-tree story is among



"Oom Paul,"

From His Most Recent Portrait.

Americans. When he was fifteen years old, Kruger and one of his sisters were approached by a medium-sized South African panther. With only a knife for a weapon Kruger attacked the animal and slew it after a fierce struggle in which he was severely injured.

After settling in the Transvaal it became necessary to clear the adjacent country of the wild animals that made periodical attacks on the Boers' cattle.

On one of these expeditions Kruger made his famous wager that he could outrun a horse, a feat which he accomplished, the distance being about a quarter of a mile.

Several days later a gun exploded in his hands as he was shooting at a rhinoceros, and his left thumb was horribly lacerated. Before his companions could offer assistance to him Kruger placed his torn thumb on a stone and calmly amputated it with his pocket-knife.

A story which sounds like fiction, but which the aged Boer himself corroborates, relates to his feat of drowning a wild buffalo. Kruger one day encountered a big buffalo which he pursued. His horse had carried him to within a few rods of the animal and he was about to fire upon it when it stumbled in a pool and fell. Before he could prevent the collision, he and his horse were rolling in a heap with the buffalo. Kruger quickly regained his wits, seized the buffalo's horns and held its nose under water until it was dead.

Two famous hunters once asked Kruger to accompany them on an elephant hunt, but when he saw that they had excellent horses and an expensive outfit, he was unwilling to go with such a poor horse and outfit as he possessed. He was finally induced to accompany them, however, and, in due course of time, they found an elephant. The beast was so fleet-footed, however, that the two hunters could not overtake it with their horses, notwithstanding Kruger's shouts to "head the beast off." After the pursuit had continued for some time Kruger spurred his sorry-looking pony and soon had the elephant "headed off" and killed. The two hunters had been left far behind, and Kruger looked for more elephants. When the hunters finally found him he had killed four other elephants, and they had not shot even one.

A remarkable story of Kruger's ability as a hunter is current among the Boers, and it is so characteristic of all his earlier exploits that its truth is undoubted. One evening, after a long day's chase, Kruger was pursued by an infuriated buffalo, which gained momentarily on his tired-out pony. Kruger plied his whip and spurs desperately, but the beast rapidly diminished the distance between them, and there seemed no way out of the impending danger. When the buffalo was within a few yards of his horse's flanks, Kruger turned in his saddle, aimed deliberately with his rifle and shot it in a vital spot in the forehead, killing it instantly.

In speaking to me of Mr. Kruger last May, Mr. F. W. Reitz, the Transvaal's Secretary of State, who has known the old Boer long and intimately, stated that he believed his chief was possessed of the power of "second-sight," or something akin to it. "Not many years ago," said Mr. Reitz, who is too practical a man to believe in hearsay, "Mr. Kruger was accustomed to tell his friends where to go for game, and to tell them what kind and how many animals they would find at the spot which he indicated. In scores of instances his friends found the exact number of bucks at the very place to which he had sent them.

"The old President was consequently besought by increasing numbers of Boers on hunting bent. Once, however, he told a man that if he would journey to a certain locality he would find eight deer. The man went thither, but found only seven deer. When Mr. Kruger learned that he had made a mistake he was sorely grieved, and that night he prayed to the Lord that the strange power might be taken away from him, lest he should unwittingly deceive others."

Kruger took a leading part in many hunting expeditions to the Zambesi district until he was about sixty-five years old; then the foreigners came flocking into his country so rapidly that he was unable to spare the time from his executive duties. Thereafter he had the British lion to deal with, and it is more than probable that his early experiences with the South African variety stood him in good stead.

That the grim old warrior must, by the fortunes of war, end his days, according

to the present outlook, far away from his old hunting grounds, is a sad finale of a great career, but even his enemies will acknowledge that the old "Lion of Rustenberg" always observed the rules of the sport.

The progress of mere material prosperity and the development of the natural resources of the Continent may be sensibly accelerated in the near future,

but fellow-sportsmen the world over will be the first to deplore the tide of senseless destruction which is almost certain to follow the incursion of the Philistines into the regions over which "Oom Paul" hunted so successfully. It is much to be feared that he was the last of the mighty hunters of the Transvaal, and upon him, it may be said, the mantle of Gordon-Cumming appropriately fell.



A Famous Hunting Ground in the Transvaal.



THE OLD-TIME PRAIRIE CHICKEN HUNT

By Emerson Hough

WE should speak of the prairie chicken as we do of those dead or about to die, and hence say nothing but good. Yet even were the fate of this big grouse less certain, and did it exist now, as formerly, in great numbers and over a wide portion of the country, there could be said of it only that as a game bird it was always entirely lovable.

Other times, other customs. We hunt this bird now in the wide cornfields, where once were the wide prairies. We find him in the remote sand-dunes, even discover him in the slashings of the pine lands, where vast wildernesses of grass have taken the place of the timbered swamps. He is a bird of changed habits and of new habitat, doing his best to survive, though all too helpless even after generations of bitter education.

More and more we prize him as he becomes scarcer. Yet to value him at his real worth one needs to have known him in the past, as well as in the present; to have seen him a quarter of a century ago, when he had a home of his own, and was not a vagrant wanderer, a furtive fugitive, full of fear and self-distrust.

The prairie chicken was the game bird of the West, and he passes with the passing of the West. Fearless and unsuspecting, of open nature and honest as the sun, he had qualities too admirable to insure him the protection or gain him the

respect he deserved in the heyday of his prosperity, but qualities which we may now admire all the more in the retrospect.

The old-time chicken hunt (for in the West this bird was known only by the universal name of "chicken") was not a hasty scramble behind a nervous, racing dog, yielding sometimes a half-dozen shots at birds which flew a mile and dropped in the middle of the biggest cornfield. It was not a matter of a long expedition into a far-off country, at large expense and sometimes with small returns. Quite otherwise, it was an occasion of pleasure, of deliberation, and of that dignified and reasonably certain enjoyment which best comports with real sport. One did not go to Dakota, Nebraska, to Texas, to the pine woods. Where then? Why, to the edge of the village, on his neighbor's farm.

The chicken was the bird of the people in the old times. The idea of the chicken hunt of that day brings up no pictures of little fields, of wire fences, of dusty roads. Rather it calls up a panorama of a land now vanished. To one who saw it in his youth memory brings up keenly into view the picture of the wide and beautifully rolling prairie sea, crossed ever by that strange, deceptive wave of the grasses in the wind. This rolling, wrinkling sea was dotted with bold dashes of yellow where the wild sunflowers grew, banded with

stripes of the quaint pink and blue sweet-williams, covered by the modest carpet of the blue prairie violet and the wild strawberry blooms, among which ran the paths of the little unseen creatures which lived beneath the surface of the grass.

Over this sea the chart showed no highways; the "main traveled road" was hard to find. There were no houses to interrupt the view, and there arose on the far horizon only the infrequent pyramid of the wheat stack, erected as the lawful signal that the time had come for chicken shooting. It was a sweet and simple land, modest and contented, that of the prairies in the old days. Where shall we find its like again, and where shall we find the

ing, and the roads were never dusty; besides, we had not yet learned that one ought to have a half-dozen dogs, with crates and blankets thereto. Such a hunt is to-day an impossible thing, if only for the one reason that the old-fashioned chicken dog is now extinct. In the old days there were a half-dozen good dogs in any Western village, dogs which would jump out of a wagon if you put them in, dogs which hunted day in and day out, for a week or two weeks if you could stand it so long. Pointer perhaps, setter usually, not often Irish, sometimes a dropper, but most commonly the old breed of powerful English setter — all these dogs, of more or less confused identity, we now call "natives" and speak of with pity.

There was no pedigree to any chicken dog, other than that he might date back to Judge So-and-So's Rex, or Major So-and-So's Don. The best strains of chicken dogs every brought into Iowa, for instance, could boast no better lineage than the vague reputation that their first parents were called "the Milwaukee dogs." This strain furnished typical chicken dogs, large, handsome, shapely, beautiful, with glossy coat and grand, deep feather, with heart and lungs to keep them going, and a courage that knew no limit. To-day it is not fashionable to have setters so large, and, indeed, the big ones of to-day are apt to be soft and coarse; yet we must remember that it was once sought to establish the fashion of taillessness in fox-dogs. We have very few good big dogs nowadays, and none at all to compare with the real chicken dogs of the real chicken days. A nobler strain of sporting dogs never existed.

Naturally, these old chicken dogs were as the regular army to raw militia, compared with the best of our bird dogs to-day. They had behind them generations of tradition and experience. Heredity of nose and sagacity were theirs, and they had back of them the life of long distances, of hard exer-



The Happiest Moment of a Dog's Life.

sport which can quite take the place of the old-time chicken hunt?

We rode in the buckboard or light wagon, heading where we willed across the open country. We had no dog crates. We had but one dog, and he did not ride, but ranged. It was never far to the hunt-

cise, of natural food and normal life. Above all, they had the birds. The exact keynote of the scent, so to speak, was ever in their comprehension, because of the continual repetition of their experiences. No pointing of turtles, or larks, or chippy-birds for them. Fortified with this breeding, this heredity, this sureness of his ability, the old chicken dog was an individual of steadiness and dignity, not a nervous, rattle-brained little monstrosity, pampered, curled and shown on a bench like a fattened swine. The owner of an old-time chicken

memory at least partly green. We shall not see his like again. Welladay! If I had it all over again once more, they might take their bench shows and their breech-loaders, and I would choose once more the open prairies and the flowers, the muzzle-loader and powder flask, and the rhythmical, steady-going dog that did not need to ride.

We rode, then, on our chicken hunt, out toward the wheat stacks a few miles from the town, and as we rode we watched the old dog swing back and across. It was July, perhaps, or August; for we knew no



The First Bird.

dog would as soon have shown his wife on the bench. The dog was part of the family. You could by no blandishment call him from his own front stoop. He ate at, or near, the family table, and more than often slept in the house at night. The children tousled him and mauled him, but never could they make him angry, nor jostle him from his own grave dignity and perfect self-respect. He was a gentleman if ever there was one; and so may this, and now and then other and all too infrequent words of eulogy, serve to keep his

game laws then, and this was still the America of yore. Each man held his gun between his knees as he rode. A gun case was a thing undreamed of. Across the shoulders lay two straps, one supporting the shot pouch, one the powder flask, the mouth of each provided with a charger, which made the loading not so slow a thing as one to-day might think. Wads were carried loose in the coat pocket, the caps in the waistcoat pocket.

There was no haste to load, for we knew there would be time after the old

dog found them. So we watched him, while up and down, up and down, went the swing of his head and shoulders as he galloped, lost in the depressions, visible on the ridge a mile away, as he crossed back and forth, setting his own quartering lines, and needing no instruction, going like a machine, rhythmically, tirelessly, beautifully. Half the sport was in watching the dog, and we traveled on not unhappily, along the ridges, across the swales, until at length some one called out, "Whoa! He's got 'em! Over there!"

Then the driver pulls up, and the Judge stops his story, and all stand looking at the distant statue done in white and orange. A statue which, as we approach, shows itself not quite a statue, for now and again the head, turning with side-long, careful eye, seems to say to us, "Come on, now, here they are. Don't get rattled. Don't hurry. Don't gabble. Take your time. Get around behind me, and then I'll tell you just where they are. Gad, they smell good!" Thus the dog, *loquitur*; and to accuse him of lying would have been to accuse the Judge himself, his owner. We did not guess, we did not hope; we knew the birds were there.

It was perhaps the first hunt of the season, and the younger fingers fumbled the caps a bit, till a hand laid on the shoulder of the boy steadied him and taught him the proper calm. Yet another was much concerned to make perfect his load according to a prevalent system, it being part of his religion that the ramrod must bounce clean out of the barrel of the gun before the load could be called properly seated. The leader of the party had loaded long ago. Two clicks of the powder flask, and the long, steady shove of the rod down with the wads; two clicks of the shot charger, letting fall a little shower of leaden pellets, tinkling faintly on the wads down in the barrel and showing they were seated firm and true. The caps went on as the forward step was begun. It was part of the religion of the old dog not to move until the lock clicked. Hence the obsolete "down charge" of today.

The guns come up behind the old dog, and he knows that all is ready. He steps ahead a few paces, calmly, quietly, waiting for us to follow. Now he stands, his nose just swerved a bit, and points close to his feet.

"Give the boy the first shot," says the Judge. "Go in, son, and kick him up."

Trembling, the boy obeys. To his swimming vision appears a vast and terrible thing, brown and huge, roaring and raging up out of the grass and filling all the air. All the air, except that one place which his first hasty, half-unconscious shot selects. Then comes the thought of shame, the thought of the reproach in the blue eyes back of him, the thought of an aim that rarely fails. The second shot, desperately strung, crumples the bird up and drops it in the grass.

"Good!" comes from the firing line behind him, and the boy's heart fairly swells with joy as he knows he has killed his first chicken. This primal delight is the same as the first copper-toed boots, the first pair of suspenders, the first real trousers. Ah! what joy.

Now others of the birds go up, three of them, only to fall also crumpled in the grass; two to the Judge's gun, the other to one of the left-hand guns. Another bird rises, but there is a barrel for it, too. A sixth goes up well ahead, and is missed, to great laughter. The Judge has loaded again, and he kills another bird. Then the remainder of the covey scatters up and goes away, still half a dozen birds, skimming on over the waving billows of the grass.

"Which way, Sam?" is asked of the driver, who has kept his wagon well to one side, but not too far to interfere with his functions as head marker. And this is a very vital question, for good marking, as much as good shooting, helped to make a bag on the prairie, where everything had for the novice so bewildering a sameness that he could not find his own dead bird, if for an instant he removed his eye from the spot.

"Over by that big rosin weed, just to the left of the dark band on the grass," says the driver; and thither go all the party. It is not far, not over a quarter of a mile, probably not over a few hundred yards. The dog is the best marker, and he watches the flying birds with one eye, even as he goes after the dead ones. For the dog does the retrieving as well as the pointing, and he does not retrieve until all the birds are up, modern theories hereon to the contrary notwithstanding. The old dog always brought in the dead birds gravely, quietly, his tail slowly wagging,

his eye full of satisfaction as he piled them up at his master's feet. This was his part of the sport, and in those days no one would have thought of depriving either himself or his dog of this last act of the drama.

This is how, after following up the first covey, and also nearly exterminating a second, we had more than a dozen birds by the time we got to the farmhouse where the wheat stacks were. The farmer was glad to see us, and while his wife cooked chickens for the midday meal, there was a leisurely visit with the farmer, who told us where the different coveys were upon the stubbles. We took it easy, and the old dog climbed into the tub at the well, where the horses were watered, and lay there panting and lapping, after his own fashion of relaxation.

We all knew that the real business of the day was yet to come. Not until five o'clock in the afternoon did the proper time come for working on the stubbles. It was this evening shooting which enabled us to give the farmer a dozen birds, two dozen, as many as he would take, while we carried the rest back to the village for any man who would accept them as a favor.

In the old prairie days the chicken was an open book. His habits were regular as a clock. The dial of the chicken really dated from about four o'clock in the afternoon. Whenever we found a wheat stubble after that hour, we knew that we should find prairie chickens. The old dog knew the chicken clock. At about that hour he would take the wind and go straight for some shallow swale or slough leading up from the grass into the stubbles. He would not cover the center of the field, but ranged either on the edge of the stubble, or a little way in on the grass beyond it. He knew that the birds would walk slowly up on the stubble, out of the deep grass where they had passed the day sheltered from the sun. Later in the evening the dog would hunt deeper in the fields, and at dusk work out to the center, knowing that the birds by that time would have fed out far, and would be most apt to be found on the ridges or high knolls.

In the morning the process was reversed. If any birds were on the fields, they would be working from the center out towards the grass. Now and then an



A Well-Seated Load.

old cock would be lingering on the knolls in midfield. If the day was rainy, cool or very cloudy, the birds would stay on the stubble later. By nine or ten o'clock of the ordinary summer day they would have moved out into the grass again. This going into the deep grass was almost the only way the chicken had of protecting itself, for it was hard work for both man and dog to hunt the sloughs at midday. Yet the defense was but a weak one, for we knew that, no matter how many grasshoppers the covey had caught in the grass, they would surely come out on the stubbles in the evening. Thus a stubble-field was, in the late summer, a very death-trap for this bird. In the winter time the corn-fields were their ruin; for here the farmers set their big traps with dropping doors, and sometimes took a couple of dozen chickens in one trap at a time. What a poor, helpless fool this big, brown, innocent prairie bird was, to be sure!

At the approach of the first frosty nights the nature of the prairie chicken underwent a certain change, and the coming wildness of the elements entered somewhat into his blood. Regularly as a cal-

endar, September first would find them growing wilder, and the fifteenth find them packed, several coveys uniting into one large flock, which then lived almost altogether on the stubbles and the corn, and roosted in some far-off, grassy slough. As the birds were then much more difficult to approach, the dog became more or less useless, and there were but few who sought the prairie chicken when the dog could not be used. The farmer's boy sneaked for a pot shot as they perched on the straw stacks in the morning. The sportsman sometimes got long shots at them as they rose wild on the corn, and of a warm October day, if he was able to follow them for two or three of their mile-long flights across the country, until he got them scattered in the grass, they might lie like stones in the middle of the day, and give him grand sport at strong and handsome birds, fully matured, and, indeed, more worthy of the gun than the thin-plumaged infant of midsummer.

Sometimes in the winter a rifleman would go out after prairie chicken in the timber, when in times of deep snow they clustered in scores upon the trees, or perhaps for hundreds of yards lined the stakes of the rail fences. Even there the bird was open, obvious and bare of cunning. If you shot the lower birds out of the tree first, so that they did not disturb the others by falling down through the branches, you might, if you were a steady rifle shot, almost wipe out the flock before the remnant took wing.

The sporting value of the prairie chicken lay chiefly in his adaptability to work with the dog. It was never a difficult bird to kill, if one but kept cool and took his time; and there was plenty of time for the shot. I remember once seeing my own father in one afternoon kill thirty-six chickens with the muzzle-loading gun without missing a shot, and he seemed to think it clumsy of him to miss the thirty-seventh. There were no doubt many who shot quite as well. The flight of the bird was very even and steady, and the old muzzle-loading cylinder, with its black powder charge, was by no means a mere toy, though in the summer shooting most of the birds were killed inside of twenty yards.

Up to the latter part of August the birds lay very close to the dog, even on the stubble. It was no unusual thing for a bird-

dog to catch a chicken alive as it lay beneath his nose in the grass, and I once saw our old dog Rex catch a live chicken on the open stubble. As the covey rose, I killed two, and a bird going up from almost between the paws of the old fellow, he sprang and caught it, bringing it in to me with a sort of dubious, half-puzzled expression, as though he did not quite know whether or not this was a legitimate procedure.

It is quite likely that, had the population of the Western States remained about as it was in the decade of 1870-1880, the supply of prairie chickens would never have been very much cut down, for the bird was so common that it was not valued much for food in the region where it was abundant. It was pursued more or less eagerly, to be sure, by many sportsmen, yet there was small incentive for a sportsman to kill a great quantity of birds for which he had no use, when he knew he could go out the next day and continue the pleasure of his shooting.

Without doubt it was the market shooting which destroyed the Western prairie chickens. I can remember very well the time when it was rumored in our little Iowa village that prairie chickens were worth three dollars a dozen in Chicago. This seemed a strange and rather humorous proposition to most of us in those days. And I remember very well how, not long after that, I saw the first party of market shooters I had ever seen. Oddly enough, this party was made up of three negro barbers, from Davenport, Iowa. Their new calling having proved fairly profitable, they were togged out in much negro finery, and I remember very well the big spotted blue neckties which they wore. They had good guns and good dogs, and carried along casks of ice water into which they threw their birds as they killed them. Learning the purpose of this party on our hunting ground, and hearing that they had killed a great many hundreds of chickens, we told them to "git," and they got. I suppose they went over into another county and continued their work. This was the only negro market-hunting outfit I ever saw. It was but the vanguard of a procession of all sorts and conditions of market shooters. After that, as was natural, our chickens began to disappear very rapidly.

Now all these good old days are past and gone. There is but little real chicken country left in all the West. The bird is not extinct, but it is shorn of its former glory, albeit pursued eagerly by thousands of sportsmen who comb out all the corners of the country where it is thought there may be some birds. The Dakotas, Nebraska, Minnesota, the Indian Nations, Texas, have been great chicken countries, and each can still show some birds. The cornfields are better protection than the old prairie-grass. But what can one do with his dog in corn, and what is the sport of chicken shooting unless you can see your dog at his work? For those of us who knew the prairies in the earlier days

there comes up ever the fairer picture of a rolling, wind-swept sea, dotted with sunflowers and sweet-williams. We can look at the old muzzle-loader on its seldom-visited rack, and can fondle it for "Auld Lang Syne." We have at least the picture of the old dog in some forgotten portfolio, I warrant, if we needed other picture than that set in the mind, and to-day, as vividly as though it were but yesterday we last saw him, we can see the gravity and melancholy of his eye.

What, then, has become of the myriads of these birds which covered thousands of miles of what was once America? They are gone. Gone into the insatiable paunch of Israel, God wot!



The Midday Rest at the Farm.

THE OUTLOOK FOR FOX HUNTING IN AMERICA

WIRE FENCING AND WIRE JUMPING

By David Gray

IT is not uncommon to hear the opinion expressed that riding to hounds in America is a fad, which, like other fads, will last but a day. And it is intimated that the increasing obstacles which beset this sport indicate that its day is nearly over. It is only necessary to consider the development of 'cross country riding during the past generation to refute the charge that it is a fad, but it is true that serious obstacles menace it. Since the Queens County pack, established by Mr. F. Gray Griswold and the Genesee Valley Hounds established by Mr. W. Austin Wadsworth less than thirty years ago, the following prominent hunts have been organized and are now regularly hunting their respective countries under more or less flourishing conditions: The Radnor Hunt near Philadelphia, the Myopia and Dedham Hunts near Boston, the Rosetree Hunt near Philadelphia, the Elkridge Hunt near Baltimore, the Meadowbrook Hunt on Long Island and the Chevy Chase Hunt at Washington. Besides these Mr. P. F. Collier's Monmouth County Hounds and Mr. C. F. Mather's admirable private pack and Mr. Thomas Hitchcock's American Hounds are hunted more or less regularly and furnish excellent sport.

The showing of American hunting during the first generation of its establishment is certainly one which gives those who believe in this sport the right to have confidence that it will endure and flourish. It should perhaps be stated that fox hunting with American hounds not kenneled or trained to hunt in packs is not the subject of this discussion. The Southern States have practiced this sport since Colonial days and doubtless will continue to do so.

Several important distinctions exist between such hunting and drag hunting or English fox hunting. In the South the sport is found primarily in the working of the hounds. There is little or no jumping. In hunting with English or Ameri-

can hounds hunted in a pack as is the practice with the hunts just mentioned most of the men ride to jump and the working of the hounds, provided only they are fast and can hold a line, is a secondary consideration. In drag hunting which flourishes at Meadowbrook, Myopia and Dedham, the sport consists wholly in riding across a line of country with plenty of good-sized jumps and at a smart pace. The hounds merely show the way. Those who enjoy fox hunting decry the drag, but there is much to be said for each, and they are so closely allied as to be properly discussed as the same sport.

Of the several obstacles which menace riding to hounds in the Northern and Eastern States the chief are probably first, the mistaken and often unfair attitude of the American farmer and second, wire fencing. Ignorant and illnatured newspaper editors are chiefly responsible for the frame of mind of the farmer. From the time the first hunts were organized in the East they have ridiculed and misrepresented the sport. Drag hunting has been pilloried as the inane pursuit of an anise-seed bag. Fox hunting is decried as the cowardly chase of a helpless and harmless beast which the Society for the Prevention of Cruelty to Animals should abolish. The men who hunted were represented as anglomaniacs desirous of establishing an aristocratic fad. Thus at the outset the mind of the land owner was filled with suspicions which it has been hard to remove. Where hunting men have used tact and have shown an appreciation of the courtesy which permitted them to ride over the land, and furthermore where they have avoided wanton trespassing and have settled damage claims justly and promptly, little serious difficulty has been encountered. The farmers have been quick to appreciate that riding to hounds was one of the best of sports and have been glad to participate in it. The experience of exist-

THERE ARE OTHER CHECKS THAN WIRE.



ing hunts, pioneers as they have been in a field unfriendly to them, certainly proves that the right men working with the right policy can overcome the prejudice of the land owners and make fox hunting practicable in every country otherwise suitable for it. What has been done once can be done again.

The problem which wire fences presents is a more difficult one to solve. There are few localities in the Northern and Eastern States where wire is not already in general use, and the probability is that within the next ten years the increase in its use will be very great. It is the exception to-day that new wooden fences are built. They may be mended, but when the posts rot out they are replaced by some variety of wire fence.

There are four things which a hunt may do with a wire fence. First, it can go around provided that the wire is not on all sides of the field. This takes time and is annoying if the hounds are going fast.

Second, it can cut it. This also takes time and is bad for the fence and for the temper of the man who owns it.

Third, it can replace some of the wire panels in each field with board ones. This however, necessitates obtaining the good will of the owner of the fence and involves a heavy expense.

Fourth, it can jump the wire fences provided they are not barbed. It is obviously wrong to subject a horse to the risk of barbed wire.

The objections to cutting the wire and to going around it are both serious ones, and the wire problem probably must be solved either by putting timber panels in all wire fences or by schooling the horses which the coming generation is to hunt to jump them. This latter proposition is really not as startling as it sounds or as unlikely to be realized as it would at first seem. The general prejudice against jumping wire is probably based upon the widespread but erroneous idea that a horse's sight is not as good as that of a man. The contrary is the fact, and the chances are that a clever horse could be schooled to jump wire with as few mistakes as it makes in jumping timber. It would only be necessary to teach it that the fine strands cannot be broken and must be cleanly jumped or the consequences will be unpleasant. This done there would be no greater risk

to either man or horse than in jumping any other stiff barrier. We are told that in Australia the horses regularly jump the wire fences, and almost every hunt in America has one or more horses which either with or without the co-operation of their riders have successfully taken wire. A horse named Jupiter, formerly owned by Mr. John R. Townsend and afterwards owned and ridden by Mr. Craig W. Wadsworth, on several occasions jumped barbed wire in the Genesee Valley. Jupiter was a brute that was not to be persuaded from jumping what and where he chose, and all of his feats over wire were not directed by the gentleman on his back. But if called upon he would go true at wire and jump it cleanly. The feat was also performed by The Sheik, a famous horse, belonging to Mr. W. A. Wadsworth, Master of the Genesee Valley Hounds, and ridden by Mahoney the First Whip. Mr. Harry Smith likewise jumped wire on several occasions with his remarkable hunter Rudolph, now owned by Mr. Harrison Kaner.

These horses jumped wire without special schooling for it and if they could do it, others also probably could. The idea that a horse would attempt to brush through or jump carelessly is in all likelihood erroneous as most horses dislike to fall quite as much as the people who ride them, and once they learn that a jump is stiff, they will take no liberties with it.

It is not improbable that the disfavor in which wire jumping is now held by most right-minded hunting men will abate materially in the course of the next ten years, and that wire netting or other varieties of wire fencing which are not barbed may become one of the fair obstacles in a hunting country.

The experiment of inserting timber panels in wire fences has been already tried, notably by the Myopia Hunt. Aside from the expense and trouble which it involves, it is apt to result in a congestion of the field at such points and in crowding and delay. It also makes it difficult for a man to ride his own line. Nevertheless, if the wire is not to be jumped, the inserting of timber panels makes it possible to hunt a country covered with wire fences.

From the facts in the case it must be concluded that neither the opposition of

the American farmer nor the increase of wire fences are obstacles which are insuperable. They can be overcome by money, patience and tact. As American civilization develops more money will probably be devoted each year to sport as has been the case in England. Tact and patience are qualities which can be found wherever the end to which they are applied is one which seems worth attaining. It therefore would seem that so long as riding to hounds possesses the attraction which it now does to men of our race and temperament that the popularity of the sport will increase.

At Radnor and in the Genesee Valley the hounds hunt wild foxes, and probably offer the best sport of any of the

of the wild fox impracticable. At Dedham, for example, the drag hounds meet early in the morning and a man may have a ten-mile gallop and be in Boston at his business at the usual hour. Furthermore, drag hunting naturally paves the way for fox hunting. Younger men who enjoy the sharp gallop after drag hounds when they reach middle life naturally come to prefer the working of the hounds, the delight of a long day out of doors and the excitement which lies in the uncertainty of hunting wild foxes to a race over a pre-arranged line. And the inclination to give up drag hunting for fox hunting in the nature of things is apt to be accompanied with the means and the leisure which make fox hunting possible.



A Meet at Radnor.

American Hunt Clubs. The charm of drawing one covert after another with the momentary possibility of hearing the hounds give tongue and seeing the fox go away, and the adventurous gallop which a find entails is very great. The six or eight hours in the saddle which make up such a day pass all too quickly and leave memories which are only pleasant. Fox hunting is assuredly the first of sports but drag hunting is not at all to be looked down upon when fox hunting is not to be had. As might have been predicted, drag hunting has proved popular in communities where relatively few men could devote entire days to it as fox hunting requires, or where difficulties with land owners make the hunting

In Great Britain several hundred packs of fox hounds are regularly hunted. There is every reason to believe that a century from now the sport will be equally popular in this country especially in the states which have somewhat open winters. In the vicinity of most of the large inland cities such as Buffalo, Detroit, Cleveland, Chicago, Cincinnati, St. Louis and St. Paul there is country adapted to running hounds and there is the wealth in those cities which eventually will undertake it. It cannot be expected to come suddenly but the ever-increasing exodus of city dwellers to the country, the spread of polo and the growing taste for out-of-door sport are continuously at work to produce the end in question.

VACANT HOURS IN WAR

THE SPORTING INSTINCT OF THE BRITISHER

By Guy H. Scull

ON Christmas Day, a year ago, General Buller's army was encamped at Chriveley Hill; and because it was an army of Britishers, the day was given chiefly to sports.

Only ten days before this the broken regiments had come crawling back to the camp from the disaster of that mad attack on the Boer position at Colenso. Even now the tents of the foremost brigade were almost within range of the enemy's big guns. It was a time of strange uncertainty—a time of many rumors. The British forces in Natal had started forward on the march to Ladysmith, and that first attempt to carry the heights had brought forth a shocking defeat; in result of which defeat, so the rumors stated, a great number of the Queenstown Dutch had risen to join the Boers. There was talk of flank movements. Some said "to the east," some said "to the west." Others argued that because the naval guns on the crest of the near kopje continued to bombard Fort Wylie, the second attempt would again be straight in front—and this last was called false talk, for no one wished to believe that it was true. But now it was Christmas Day. To celebrate the occasion the naval guns omitted the customary shelling. The talk was of other things than war. Some spoke of the English pantomime.

The day was scorching hot. Men who had lived long in the land insisted constantly that the dry season had lasted beyond its time—that the rains should have come before. But this might be taken as the customary remark of the old inhabitant of a country to excuse abominable weather. The grass of the veldt was dead beneath the heat of the sun. Each evening the rain of a thunderstorm poured down on the Draakensberg, but the storm never came to Natal, and the few and shallow water-holes were fast drying. It was so hot men wished ardently that they might see a thermometer so that later on they could speak of the heat in the appalling number of degrees.

Of course, both the variety of the sports and the extent to which they could be carried out depended upon the material for such to be found with an army in the field. The men of the naval brigade, as always, were most ingenious. They decided to have what they called "a bit of fun" at the beginning of festivities. Their officers gave permission. They borrowed a gun carriage from a neighboring field battery and arranged long ropes to drag it by. Then they dressed one of their number as Oom Paul Kruger and another as John Bull, placed them on the seats, and started to drag the carriage through the camps.

The disguises were far from perfect. But they were good enough to be recognized, and that was all that was needed. Immediately a great crowd collected from all sides. Some one shifted the words of a familiar music hall song and sang instead, "We'll Meet You in Pretoria By and By." The crowd took up the chorus, and all together the mass swung forward to make a tour of the entire camp. If you looked out across that land to see the far hills throbbing in the heat haze; to see the leagues on leagues of empty veldt, the dust and the unceasing, piercing sunlight, you would then understand why the men laughed and shouted.

In the afternoon all the kinds of sports which were possible under the circumstances were held in the open space about the camp. To the different arms of the service different sports were naturally allotted. The infantry had running races, potato races and the like; the cavalry men engaged each other in wrestling bouts on horseback and tent-pegging competitions; the Royal Army Medical Corps organized a race of ambulance wagons—and these same ambulances which now went tearing wildly over the rough ground of the veldt in order to be first across the finish line, to-morrow or the next day would crawl out cautiously behind the advancing battle front to bring back the wounded from the field; but the most important

of all were the horse-races of the mounted infantry brigade.

An abandoned bullock wagon which had broken down at a convenient place was made to serve for a judges' stand. The track was straightaway up a long slope in the veldt. That is to say, the horses started in the hollow and ran up the grade until they passed the bullock wagon. There was, indeed, some attempt at classification in the events; some slight difference in the length of the course; though, naturally, they could not be too particular. Instead of the horses being known, it was the riders who made the difference.

A captain in the Army Service Corps was starter. He unwound the blue handkerchief from about his neck, tied it to his riding cane and lifted it high above his head. From the crest of the rise we saw the flag drop suddenly. Then a thick cloud of dust rose up into the still and heat-blurred air. Men in the throng began calling out the cries of the English race-course. The cloud of dust swept rapidly up the grade. When close to the finish the heads of the riders appeared in the swirling gray confusion. The necks were bent well forward, the faces tense and streaked with sweat. Then the race rushed past and the crowd closed in on the bullock wagon to find who had come in first. Some of the men rode in shirt-sleeves, some in helmets; others had only one spur. The horses were worn thin in the life of the campaign. Their hip-bones stuck out far on either side. The lines of the ribs showed clear. In one case a huge Australian Whaler was matched to run against a veldt pony. But still, as I have said before, it was a horse-race, after all.

On this same Christmas Day, some miles to the east of the column, another set of sports was being held. There on the far flank of the army, Captain Cayser, of the signal corps, had for many weeks been stationed on the top of a great hill from which he could transmit messages from Ladysmith. When Christmas came he thought to arrange some games among the men. This captain was rather put to it to vary the nature of the events. Being encamped on the crest of a mountain, he had few materials to work with. A competition he invented consisted in a hunt for a live animal of any sort. One man found an ant, tricked it into walking onto

the end of a stick, brought it back first and won the prize.

It is almost impossible to give an adequate definition of the Britisher's attitude toward sport on a campaign. If they lacked a proper understanding of the responsibility laid upon them, or if they failed to realize that even the next day they might be ordered out to rush into battle, there might be chance for argument; but the British soldier knows his work. Of course, there were long periods between battles—long days in camp, when, for the majority of the men, there was no especial work to do. Games of any sort helped greatly to pass the time; the officers encouraged them. Yet there were occasions when a stranger might marvel a little at the constant signs of the sporting instinct.

When the battle of Vaal Krantz was impending, when all men knew for a certainty that within the next twenty-four hours the order would be given out for the forces to advance across the river to take the heights and the Boer position beyond, a number of officers of different regiments chose sides among themselves and held a three-hour polo match in the camp. Then, on a reconnaissance before Colenso, when a force of mounted infantry was creeping stealthily forward through the mist in feeling for the whereabouts of the enemy, a young buck darted across the line. The white-haired major halted the advance squadron and gave chase. The buck, however, squirmed out beneath a barbed-wire fence and escaped. The reconnaissance proceeded on its way.

Another incident of this kind occurred at the action at the Vet River on Lord Roberts' march to Pretoria. The advance guard of the British column had come too close upon the last of the Boer convoy, delayed in crossing the drift, and a short artillery duel ensued. The British guns were stationed on the last of the rises before the dip into the valley of the stream. The enemy was on the opposite hills, and his guns were shooting very true. Suddenly a veldt hare started across the grass. A battery dog and a dog belonging to an English correspondent followed after. The correspondent mounted his horse, yelled "Yonder they go!" and rode to hounds along behind the guns. Some men turned to shout good luck to him; others—the drivers of the limbers

waiting in the rear—criticized the running of the dogs.

Another form of amusement devoted to passing the idle hours of the campaign were the singsongs. An occasion of this sort which comes most clearly to mind took place at Frere Station a few days before the arms set out on the flank movement to Spion Kop. For some reason or other Bennet Burleigh decided to give a dinner on the veldt. Whether it was somebody's birthday or the anniversary of some one's wedding no one knew for a certainty. Nevertheless, a dinner was set forth, and a number of officers and correspondents were present. It was indeed a grand affair. To each man was issued a drink of champagne to remind him of whatever he thought fit, and though for the most part it was drunk from tin mugs, the idea was in truth most wonderful. Then, besides, there was the pudding, composed of chunks of boiled meat and half-risen dough. The host had made it himself over the open fire which burned near the table. At the other end of the table stood a piano, only partly damaged by the Boers, which had been found in a looted farmhouse near by and brought with great difficulty to the place.

A colonel of a line regiment was there, and a Roman Catholic priest and the press censor; also the artist who could play the mouth-organ, and the one who did card tricks, and the young lieutenant who sang. Each one had brought his own knife and fork and spoon and plate, and his own candle lantern, which was placed before him so that he might see the more clearly to eat. Overhead were the star-dotted heavens. On the hillsides all around the dying camp-fires of the army showed faint and red through the night. Now a long, darker mass moved slowly across the lower stars, and you could hear the sentry challenge the returning reconnaissance. Now a trooper came up the slope from the river below, where he had been washing clothes, stopped to look into the light for a moment and then passed on with his wet bundle tucked beneath his arm. A horse on the picket line began pawing the ground restlessly, a loose tent flap slapped lazily in the night wind, and always came the swish of the swollen river. No other sound than these could be heard save the quiet-toned voice of the Catholic priest, who told stories of his

captivity among the Boers, whilst across his clean-shaven, clear-cut face the uncertain light of the candles threw flickering shadows.

At the end of the dinner Burleigh rose to his feet. "Where's that melancholy musician?" he shouted, and the artist referred to played a jig on the mouth-organ which was exceedingly good to hear. This was the beginning of the concert. A major of horse was sent to the piano because it was rumored that he knew a song. The others filled their pipes and tilted backward on their camp-stools or soap-boxes, whichever they happened to have.

The major sang a hunting song with a shouting chorus, and every one joined in with the chorus and declared it the best song they had ever heard. Then the young lieutenant was called upon to recite "The Fallen Star" to slow music. A bugler from far away sounded "The Last Post." The notes of the bugle call had died in the stillness before the recitation began. The correspondent who sat next to me leaned over in relighting his pipe.

"This, in a way, is a curious thing," he said in a low voice. He was an older man, with a bald head; a man who had seen sufficient of the world so that now he could stand aside and look at his own people with clear judgment. "You know," he continued, "you know as well as I do what is the value of the present situation, and all these other men know it, too. If by any chance Ladysmith should fall, it's an even bet that the Cape Colony would rise against us, and we can all appreciate what would happen then. Do you realize that when Lord Roberts gets here it will be the first time since Waterloo that a British field marshal has been sent on active service? That shows pretty well what they think of this affair at home. It's grown serious, damned serious, and things are looking shaky for the Empire. And we all know that it rests with this column if Ladysmith is to be relieved in time. In two days, they say, we are to start on the flank movement by way of Springfield to drive them back from the western hills. And yet—well, here we are. Look about you. But it's good, isn't it? Oh, Wood!" he called to the lieutenant, who had come to the end of his story, "Wood! Play something from 'The Belle of New York,' will you? Yes, that's it, 'The Belle of New York.'"

A NEW TENT FOR THE SNOW LINE

By Frederick A. Cook, M. D.

IT is difficult for those not familiar with the peculiarly arduous task of sledging over the polar wastes or of climbing beyond the snow-line of mountains, to grasp the great importance of reducing to the minimum the weight of the equipment. Every ounce saved on the constant weights, the things which must be carried day after day, is of vital importance. The reduction of five pounds in the weight of a tent, for instance, permits the carrying of additional food for three men for one day. This extra food supply may make the difference of success or failure to an expedition.

I have a new tent to submit. It is intended for mountain climbers and explorers in frigid regions. Of all the forms of

various other tents, but for one reason or another they are all impracticable for work in icy regions where an economy of weight is necessary.

I will not enter into a lengthy discussion of the various tents. They are, one and all, either too heavy, or too complicated for polar work. The many guide ropes, the numerous and cumbersome poles, and the wastes of cloth, are all out of question when one must carry his food, bed, and even his house on his back. And furthermore, the time and labor of setting up these tents is such that the work is extremely difficult in storms and in low temperatures. I have seen five men jumping about in a freezing wind an hour trying to erect an "A" tent, and afterwards two



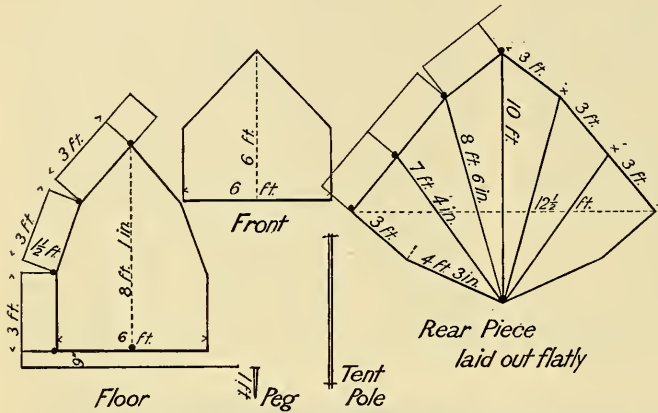
In the Antarctic Pack-Ice.—A Rear View of the New Tent.

tents in general use not one is suitable for men who are compelled to camp on snow and weather the awful storms of the polar region. I have tried the "A" tent, the wall, the miners', the Sibley, and

remained up all night to hold the canvas up. After one has had his fingers and his toes frost-bitten setting up tents, and then finds that if he will have the thing stand against a storm he must remain

awake all night and keep bracing it up, he is likely to plan something else. It is to numerous such experiences that the tent here described owes its invention.

The form of this new tent when erected is somewhat semi-conical with the base drawn out to give a convenient floor space for three men in sleeping-bags. There is



PLAN OF A NEW TENT

but one pole needed to support it. An ordinary ski or Alpine stick will answer this purpose very well. Eleven small wooden pins are necessary to pin down the angles and to offer fastenings for the guide ropes. A strip of the material of which the tent is made, or something stronger, one and one-half feet wide from the side and half width from the front, is drawn out. Upon this, after the tent is pegged down, blocks of snow are piled to give additional security.

By experience it is found that a floor attached to the tent is impracticable because within the tent, particularly while cooking, there is much condensation which runs down the tent walls. If the floor is attached, the moisture accumulates on the floor cloth making the bags wet, while when the floor is not attached this moisture disappears in the snow. The canvas cover, usually used for the sledge, is quite all that is necessary for the floor spread.

This tent can be made to any desired size, but it is intended for small parties, and its shape is best adapted for two or three men. The one I constructed in the antarctic was six feet high, six feet wide,

and eight feet long. The other measurements are shown by the accompanying drawings. When a great economy of weight is not necessary much comfort may be had by a third increase in all dimensions. Very few ropes are necessary, and the fastenings are so simple that one man can, without assistance, easily erect the tent in five minutes in any kind of weather.

The three rear pegs are placed first, then the tent pole is arranged, and the front guide rope fastened. This done the tent will easily stand while all the other pegs are driven. Finally blocks of snow are piled over the pegs and upon the projecting rim of cloth, and this so thoroughly holds down the tent that no storm can loosen the fastenings, and no wind will blow under the floor cloth.

The tent should always be pitched with the front away from the wind. In this position the wind can never have a strong force on the cloth of a large area, because every surface is at such a slope that the force of the storm is thrown off. If the wind changes its direction, as it often does in polar regions, it matters very little except when it is directly into the door which is at the front left corner. As a wind guard, this form of a tent is ideal, and it has stood against the worst winds of the antarctic.

The space within is such as to offer the greatest amount of workable room for a given weight of cloth. The floor is about the form which three men in sleeping-bags will occupy. If one man is sitting there is ample room for the cooking apparatus, and if the bags are rolled up three men can sit comfortably.

The strength of the tent depends, not so much upon the tent cloth, as it does upon the reinforcement and the workmanship of the peg holes and other parts where great strength is necessary. The tent which we used was made of heavy unbleached muslin, and it answered the purpose very well, its only fault being its

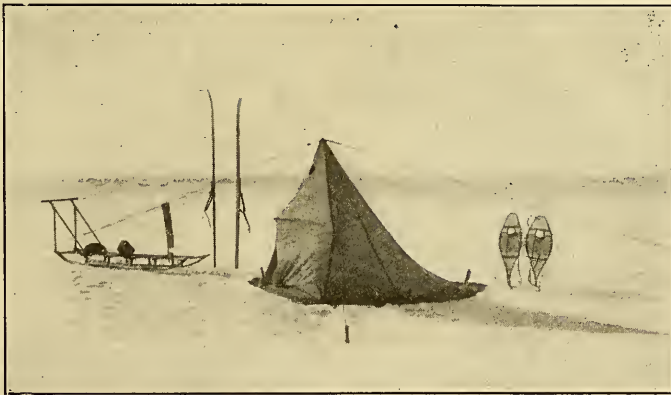
uneven elasticity. A strong China silk, or some light linen fabric, would answer the purpose very much better, and would have the additional advantage of being stronger, more porous and lighter. Our tent weighed but ten pounds, and I am sure if made of silk it could be reduced to five pounds.

A tent intended for use in frigid regions should not be made of waterproof material. If the cloth is impregnated with any of the waterproofing mixtures it becomes so brittle in low temperatures that it breaks upon folding, and there is another all important disadvantage; such cloth, or any tightly woven material, does not permit the escape of the moisture which is always generated within. A scientifically ideal tent wall would be a double sheeting of some gauzy material, the two thicknesses being separated from each other about one inch. This would freely permit the escape of the internal humidity, which is always the curse of polar workers, while it would sufficiently prevent the penetration of the wind. It would, perhaps, be an excellent idea to have window spaces, spread with gauzy or porous material, made in the front of this tent near the peak—mosquito netting is by no means out of place

on the polar ice-fields, for it is an excellent wind guard, retaining the internal heat, while easily allowing the escape of moisture.

A very essential adjunct to the durability of this tent is to be gained by reinforcements of rope or strong braids of non-elastic linen securely sewn along every line where strains are likely to occur. The form of the tent is such that it is easy to do this. For instance, across the front, between the two lateral guide ropes, there should be a band, while all of the lines from the peak to the pegs must be similarly strengthened.

The idea of the form and the construction of this tent is the outcome of personal experience. So far as I know it is new in every way. The plan is mine, but in the details of the workmanship I have had valuable assistance from A. De Gerlache and R. Amundsen, of the Belgian Antarctic Expedition. The tent, as here described, has stood the test of the sweeping south polar storms, and I am anxious that my fellow-explorers should have the benefit of its success, for the lot of polar explorers and mountain climbers is always a hard one, and anything which will alleviate their sufferings, or add comfort to their weary life, is a godsend.



*A Side View.

*The photographs were taken while making experimental journeys over the Antarctic pack-ice during September of 1898. The temperature at that time was about -35 , and an almost endless Easterly gale swept over the frozen sea. The *Belgic* was still hopelessly beset, as she had been for six months. It was, however, never safe to leave the ship for any considerable jaunt without taking a tent and camp equipment, because the movement of the ice was such that open leads were easily and quickly formed, which often made it impossible to return during the same day. On the illustration showing the rear view of the tent the *Belgic* is shown in her winter berth, also Captain Lacomte in traveling costume. On both pictures are shown the sledge which we found of greatest practical service, as well as the Canadian snowshoes and the Norwegian ski.

THE FOOTBALL COACH'S RELATION TO THE PLAYERS

By W. Cameron Forbes

TO the coach at the beginning of the football season the game presents somewhat the same delightful feeling of possibilities that one has at the theater before the curtain goes up, or when sitting down to a game of chess with all the moves before one and the values of the various pieces in mind.

In what direction can the game be developed and how can you anticipate that development and turn it to the advantage of your team?

In going over all the glorious opportunities for new combinations, double passes, running kicks, long passes, criss-crosses, etc., all to be controlled by orders shouted in cipher of which your men only have the key, it seems as though no defense no matter how strong could prevent your crossing the opposing goal line at will.

And yet there are facing you certain cold facts of history which tell you that no important game is likely to be won by more than one touchdown and that the winner seldom scores more than twice.

Just as your nicely laid plans and devices are worked out and your second eleven trained up on them with due care (as the time of your first eleven cannot be wasted on experiments), up comes some tall stripling from the 'Varsity team with an eye to the ball and the fierceness of a wild animal, and over goes the nicely devised play like a card-house thrown down by a child for the sheer wantonness of seeing it fall.

It reminds one of the scene in "Gareth and Lynette" when Launcelot on the eve of battle attempts to post Gareth on the various points of fight.

"Here be rules," said Gareth; "I know but one—to dash against my foe and overthrow him."

Gareth was right; no machination or device is of any avail against the fierce aggressiveness of a young knight who knows no rule, and Launcelot must have been a better fighter than coach or he would not have tried to bother Gareth

with them on the night before the contest.

And yet science must be learned and the rules known and followed, so the coach is forever wavering with science and intricacy on one side and aggressiveness and simplicity on the other.

A football team without a coach cannot hope, except under very exceptional circumstances, to make headway against a team which has been properly coached, for the reason that there is so much that can be gathered by the assembling of the experiences of hundreds of good players that it is beyond expectation that a team should find out all the most effective methods of play for themselves without some one to teach them. It is like learning a trade. A man must first be taught the highest point which the science of the game has reached before he can hope to compete with others who have had that privilege.

I have noticed several instances in which school teams have endeavored to get along without a coach, and usually they have had disastrous results. An experienced man can often in five minutes correct some weakness in a team which has led to defeat after defeat on the gridiron.

One often sees a school team playing a game in which the opposing backs come plowing through the line for five- and eight-yard gains, time after time, until it seems hopeless to stem the tide of these attacks. Between the halves, in one instance which came under my observation, it was suggested to the captain that he should play his guards two feet from the center instead of two yards from the center, and during the remainder of the game there were no more gains made against them. Similarly, very remarkable results can be attained by making each man responsible for some part of the ground, by directing the movements of the ends, by shifting the swing of the interference, or by teaching the team a little of the more strategical part of the game, such as giving them a few pointers as to the proper

time for kicking and where different plays can be tried more advantageously.

I have seen a team naturally weak, owing to the lightness and inexperience of the men, taught to become almost irresistible among teams of its class by doubling the quickness of its attack, playing three or four plays without a signal, and only stopping to take breath before beginning a second series of onslaughts, which quite took their stronger opponents off their feet. It is thus that a coach can, by a little general supervision, make a great difference in the play of a given set of boys.

This, however, can no longer be done among the better grade of teams. College men are now too well taught to be defeated in such way. The larger schools and the smaller colleges have a system of coaching which aims to begin with the rudiments and develop the players to the highest pitch of excellence. They begin by teaching the men how to stand and how to make all their movements effective and telling. They are taught to drop on the ball, to catch punts, to kick correctly, to pass the ball from hand to hand and hold it properly, to block and break through and to utilize their arms in the rush line, or in warding off a tackler.

At the same time, the plays are drawn with the greatest care, the men are taught to start quickly and run hard and to know their signals. This can be done by a good coach, and there are many teams even among the most successful which are trained on what has often been called the "One Man" system. Here the strategy, the play of the individual and the marshaling of the men on the field are all in the hands of one man, who is apt to rank above the captain.

This state of affairs is partly brought about by choice and partly by stress of circumstances. Colleges which are not situated near large business centers find great difficulty in persuading their graduates to come back and coach.

It has been the uniform policy among the larger colleges not to pay more than one man to supervise the coaching, and without offering inducements of a financial sort it is next to impossible to obtain the time of the best men. Accordingly, the smaller colleges, particularly those situated in more or less remote places, have to employ some one man to

act as coach and take full charge of the whole development of the team. The advantage of this method is that the men are coached uniformly, and it is an axiom that a worser policy, well carried out, is more effective than a better one badly carried out.

These "One Man" teams have unity; they work as a team; they know what they are out for, move in a business-like way, and unless something much better is supplied by the many coaches of teams which they meet, they are apt to win on the very fact of their precision and dash.

Harvard is peculiarly favorably situated for obtaining the services of the largest possible number of coaches, owing to the large body of graduates living in Boston and vicinity, and the extensive graduate schools which tend to keep men on after their playing days are over.

Each season opens with an abundance of material and a multitude of coaches, and it becomes necessary to have a head coach, whose business shall be to get the unity, without which no team can hope to win.

This brings me to the consideration of a team where a "One Man" policy is not part of the programme.

Here we have coaching of a very different sort. There may be coaches who do not know the working policy of the team, but who know how a ball should be kicked, and they come out and give their time solely to training kickers and developing them to the highest perfection in that particular art. Others whose specialty may have been excellence in interference come out and coach the men in their specialty. Hours are spent in teaching men how to stand properly, or balance when crouched down, or to use their hands, and how to watch the eyes and movements of the opposing players and size up what the play is to be, and know how to meet every kind of an attack, whether fair or foul.

The immense amount of individual coaching to which such teams are subjected makes a head coach an absolute necessity.

There is a point in the course of the season where the head coach must tell his coadjutors that they have had their turn, and that the time has come to make a team out of the material upon which they have all been working; when it is too late

to correct the faults of the individuals, and when it is necessary to assemble the various parts and begin to call for the clock-like movements which characterize a first-class team during its final matches.

With the approach of the big games, excitement in the community begins to run high until it reaches a fever heat, and the letters, telegrams, suggestions, etc., with which the coaches and captains are flooded are beyond belief, while the inquiries for the health and condition of the men and of the team become intense and incessant.

This is the test of the mettle of the coach. He must keep the coolest head in guiding the movements of the players and of his fellow coaches. Things may not be desperate because a team does badly for one day, neither is your final game won because your team does better than your principal opponent against some common antagonist, although lots of people think so. On the contrary, there are faults to be corrected, improvements to be made, and the team must be turned out on its last day a better team than it was at any stage of its previous development.

It is difficult when excitement runs at this high pitch to say "No" to thirty or forty men who are anxious to go on the field and correct faults which are glaring to the eyes of all; but this must be done. The team must be taught to play for the ball and for the opposing goal line and not be confused by the mass of coaches explaining their individual faults.

Often most delicate questions arise in regard to the relative responsibility of the coach and the captain. At Harvard it is the captain who is supreme; it is he who is in charge; the responsibility lies with him. He chooses the coach, and it is his to decide finally all of the questions. Ordinarily, this is an unwelcome responsibility to a captain, for his burdens are not light, and he is glad when the coach steps forward and takes the responsibility of settling questions of vital importance to the team. There are times, however, when it is obvious that there will be disagreements on some point of vital importance, and it is then that the most serious difficulties in the coach's position arise. There is but one course left for him; if he cannot come to an agreement with the captain he must step out and yield his place to some coach who will be in sympathy

with the captain's ideas. The coach should always hold himself ready for this contingency, and the captain should be very sure of his point before he ever brings it to such a pass.

It is not only in knowledge of football that a coach may show his value to the team. He must have friendship and sympathy with the men and with his fellow coaches. The knowledge of football held by any given man will not bring to one of our best teams a successful season. The coach must know how to bring out and use the combined knowledge of all of the coaches within his reach.

The friendships with the men are an important feature of the work, and without these friendships and sympathy no coach can hope to obtain the best results. The qualities which go to make up the man who fights his way through a large field of competitors to a position on one of our university teams are qualities which command admiration and respect.

The coach cannot handle all men alike. Their peculiarities and dispositions must be studied; some must be urged and others held back, and all must be watched with a care that a physician uses in watching the symptoms in the more critical of his cases, in order to bring the men to their highest efficiency at the proper moment.

It is in the course of the final games of the season that the duty of the coach becomes most arduous. Prohibited by the rules from directing the team from the side lines, he must stand still with tense muscles and note every movement and every play of his men which will carry the team through to victory or defeat. The policy he has laid out may be reversed, and yet he would be powerless to order any change. Between the halves, however, the half that is past may be gone over and the half to come discussed, and measures taken to correct the errors and weaknesses developed by the early part of the game.

I believe the strain of a big game to be more severe to the coach than to the player, as the latter is relieved by physical movement during the match.

Another feature of the work of the coach lies in his relation to the development of the game. Numberless new plays, new forms, tricks and styles of play are presented for his consideration, and it is

for him to pick and choose amongst these those that he deems to be practicable. It is thus that the future of the game may be molded by the decisions and choice of those in charge of the teams that are the acknowledged leaders of American football.

Each year a certain amount of the time of each of the 'Varsity teams must go to new development. New plays which the coach and captain agree to exploit must be tried slowly and tentatively, and so, gradually, step by step, the teams grope onward, making many moves that have to be retraced, and yet the advances that are established are accepted and copied by a hundred eager teams pushing out along the lines laid out by the leaders.

Is it out of place here to ask where all this is leading and to venture a forecast of the future of the game?

I look to see a faster game with play gradually opening, and the kicking game developed and used more freely than in the past, particularly the feature of goals from the field.

There should be a gradual growth of

the feeling which is now evident on many sides against permitting the use of many men behind the rush line. The game would then become simpler in the number of combinations and easier to follow in regard to rules and technical points.

In this connection I should like to see a tendency on the part of the rules committee to lessen the number of rules, the variety of penalties, and generally to simplify the game.

All items in the rules which provide for remote contingencies, proved by experience not to be vital, should be struck out, and thus leave the game simpler and easier to learn and understand.

But the distinctive features of the game must not be changed. The bodily contact, the fierce struggle of man to man in the rush line, and man to man in the tackling and interference must stay, or the essence of the game will be lost.

Football is the expression of the strength of the Anglo-Saxon.

It is the dominant spirit of a dominant race, and to this it owes its popularity and its hopes of permanence.

DEPARTURE

By Clifford Trembly

Now fall the fruited nuts upon the mold,
 And sighing winds sweep through the trembling wood,
 While, touched by Nature's artist, red and gold
 The trees become, that once his blandishments withstood.
 Light as the thistle-downs, belated bees
 Still boldly haunt the waving goldenrod,
 And sip the summer's sweets unto the lees
 Till home they go as drunken as a god.
 And it is here! the end of all the days
 Which we, in pleasure sweet, have idly spent.
 So be it! we can say farewell and keep
 Safe in our hearts, through all our tangled maze,
 The days that were, of rest and sweet content,
 And, holding fast to memory, not weep.

COUNTRY HOMES ON LONG ISLAND

WHERE WEARY MEN FIND REST

By Leonidas Hubbard, Jr.

FOR years in a certain Western State a strange old man has wandered about from city to city lecturing to whomsoever would listen. Every night he has walked some miles into the country to sleep and all urgings to remain in town have been met with a declaration that the "pressure" of the city was more than he could bear. Men have humored him as a harmless lunatic, yet this complaint of the city pressure sounds to the nerve-racked man of the office like most rational philosophy.

Pressure is an excellent term for one of our conglomerate city forces. Who has not felt this force grinding, jarring, jamming, until it seemed about to compress his very soul to nothingness? And who on moving from city to country has not felt his soul expand as does the withered apple in the thinning atmosphere of the receiver. Someway our souls come to have a good deal in common with the withered apple; a gradual wasting from within, a decay of the resistant fibers, then a withering, a wrinkling and a dwarfing from the ever-present pressure without; the pressure that kills memory, destroys the power to reflect and makes us slaves to daily routine.

The chief difference between the old lunatic and the average of his fellows was in his favor. He felt the pressure and went into the country to escape its action. The most of us have felt it and gone on tamely submitting to the dwarfing process. Americans have escaped the sordid mass of city strugglers for a few weeks in summer, but it is only with the closing years of the century that country homes have come in any large extent to tempt them from the town at other periods of the year.

The "country place" and the "gentleman farmer" have been associated in the average mind with Great Britain, not because they are un-American, for surely nothing is more in keeping with American ideas and ideals than this same form of country life—witness the delightful colonial life of our own early South—but

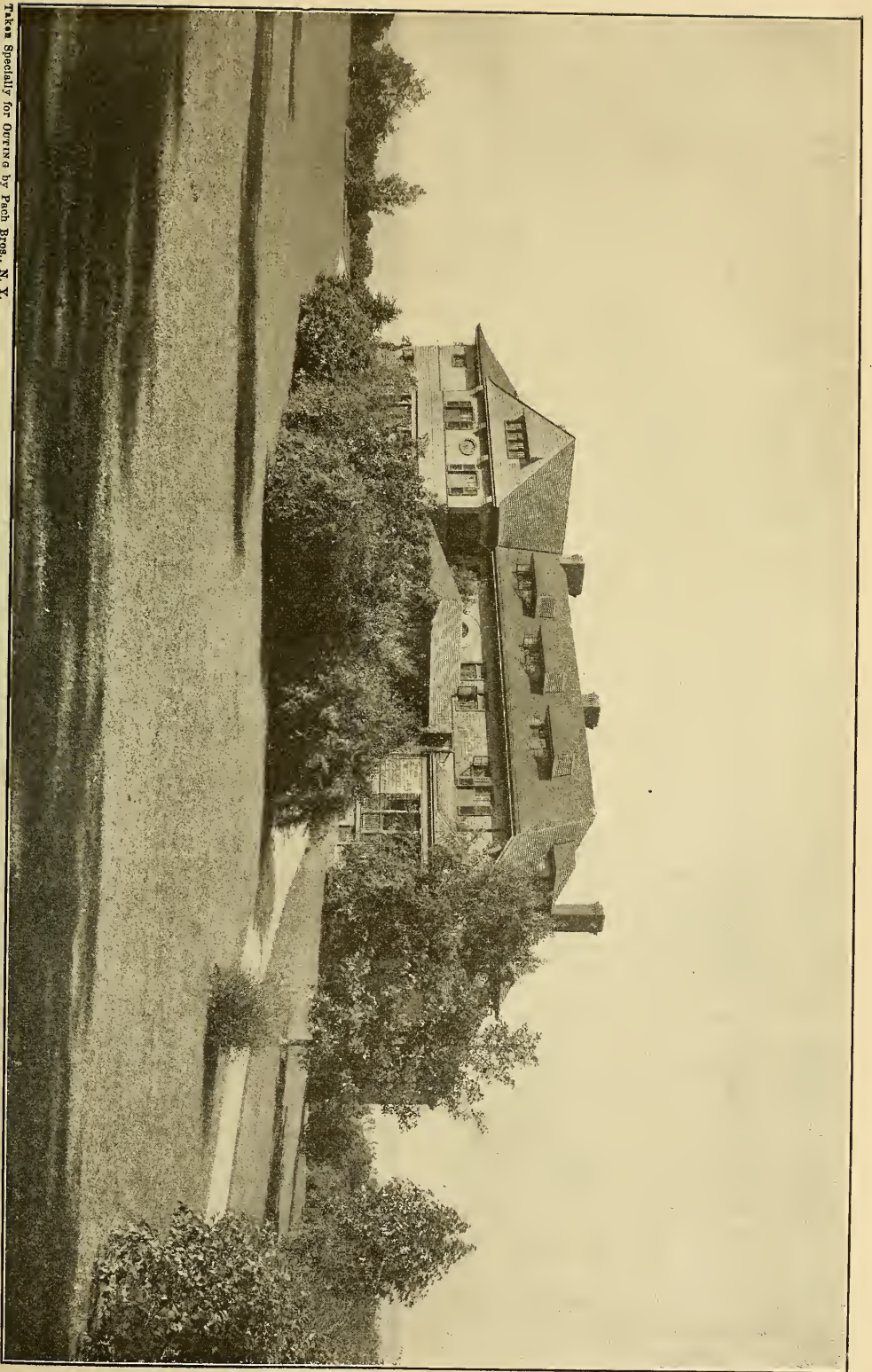
rather because modern America has until the last two decades been too busy money-making to venture out of driving distance of the office. But now when fortunes have been made, when the average successful man can divide with some one else the office work, the American, as well as his British cousin, may turn his thoughts away from the roar of train and truck and car, away from the murder-proclaiming shouts of the newsboy, toward a quiet country home.

Along with this influence which affects chiefly the rich has come the perfection of rapid transit, and many a man who is still obliged to report daily at an office and whose income is only moderate, is able to maintain a country home where he spends part or all of the year, finding in the reduced cost of living nearly an offset to the price of commutation tickets.

So rapid and so irresistible has the current in this direction of late become and so truly is it an expression of the outdoor spirit that OUTING deems it worthy to be made the subject of a series of articles; a series in which the development of American country life shall be set forth.

It is not strange that with the coming to Manhattan of the outdoor spirit the mind of the soul-oppressed New Yorker should turn toward Long Island. In fact, the only remarkable thing is that there should be left on this strangely neglected little land a place for country homes. Yet, despite its early settlement and its proximity to the Metropolis, it still has great stretches of wild country; country full of the lore of Indian tribes, the romance of Revolutionary battles and the tales of pirates. So little, indeed, was it noticed that when a few years ago certain millionaires began to move toward the country they found this island offering the very attractions they wished.

The character of the country is varied but not more so than the taste of the home-seeker. One lover of outdoor life has chosen to settle in the midst of broad acres of farm land, there to build a palatial farmhouse and a barn as big as Madi-



Taken Specially for Opening by Peck Bros., N. Y.

A COUNTRY HOME ON THE CHARLES PRATT ESTATE.

son Square Garden. Another has preferred to perch himself upon a bluff overlooking the Sound, where he can gaze down upon historic waters or glance across to his boyhood's New England home. Another has bought a stretch of sand - dunes, barren, inhospitable and cruel, along the southern shore, where the sound of the breakers is never still and where, when storms and wind and darkness produce the proper combination of ghosts, black cats and devil, the spirit of Captain Kidd walks abroad inspecting the hiding places of his treasure. Again, the city man disdains farm and sea alike and settles his country home in the very center of the forest, with less clearing than that which surrounded the log cabin of his original American ancestor.

But while the country home takes as many forms as the character of a varied country and the most ingenious human minds permit, it is all inspired by one spirit, the longing for fresh air and, still more, the longing for such freedom and solitude as man finds only in the presence of the original forces. There is rest in digging in a garden, and the millionaire may temporarily become the man with the hoe. There is rest and companionship and sympathy in the wild woods, and one finds barren sand hills and the roaring surf restful and inspiring after days of strife and worry in the turmoil of a great city. To attempt the selection of one Long Island country place as typical of the rest, or to name one as surpassing the rest in charm or beauty would be folly, for the types are nearly as numerous as the homes and the charm of each is separate and distinct from that of all the rest.

Leaving the railroad at Glen Cove and driving down through the streets of the ancient town one finds himself upon the Charles Pratt estate. This differs from other Long Island country places in that it is the home, not of a single family, but of six brothers. If one would get the atmosphere of rusticity let him turn off the main road to the left and make his approach from the rear. His first glimpse of the estate is the barn, a great, spreading affair, large enough for a good-sized livery establishment. Here are some sixty horses and thirty or more head of cattle.

Passing the barn one enters the forest whose trees are mainly oak and beech with now and then a cherry, a locust and

a walnut. The timber is not large, but it is thick and the sounds of the town are shut out. The forest is well cared for, and the unsightliness of dead branches has been largely avoided without giving the least suggestion of the pruning knife and kindred devices of man, which ruin the artistic appearance of a forest as surely as white-washed stones ruin that of the farmer's frontyard.

The roads are gravel-covered, well-kept lanes which branch with an unconventional frequency that suggests civilized lumber roads, if such things could be. The woods are literally full of gray squirrels, beautiful fellows that are continually racing across your path and dodging from tree to tree apparently as fearful as though they were used to being fired at every day in the year.

If you do not lose your way on one of these wood roads you will issue out upon a macadam drive running parallel with the Sound. On the hill at the right rises a tower, not unlike the ancient block-house in shape. From this floats the American flag, while back of it stands a large wooden country house. Farther along on the left, with the waters of the Sound in plain view, are three other houses, large roomy mansions, unpretentious in structure and surrounded by the most beautiful of lawns. Cutting this road at right angles is another drive of macadam and beyond this is the old manor house which stood here when the estate came into the hands of the present owners. It is a brown wooden building that calls to mind at first a prosperous home of colonial days and sets one to imagining quaintly dressed old beaux and belles, with soldiers in tattered homespun and other soldiers in bright red uniforms.

The estate has been kept intact, and here the brothers dwell together in unity. Here they find rest from the city and its duties. They have their own rifle range and their own traps. On the bay are their yachts and launches; the golf links of the Nassau Country Club are within a short drive. When tired of sport they may turn farmers, though the farming here is merely incidental and has for its main object the suppression of weeds and the beautifying of fields.

The management of the estate is democratic. There are no signs warning the public to keep off and no watchmen. You

may walk down the lanes or through the woods so long as you behave yourself, and there is every reason to believe that the public has, on the whole, been worthy of this trust. There is nothing in the surroundings to suggest the domain of the feudal lord, the entire estate breathes an atmosphere of true democracy and true Americanism.

In this matter of dealing with the public the owners of Long Island places differ as much as in the selection of sites. After breathing the air of America on the Pratt estate one may take the train and dropping southward to Roslyn be within a few minutes' walk of the great stone gateway of what might be the land of Europe's most exclusive lord.

This is the new country home of Mr. Clarence H. Mackay. It stands in the Wheatley Hills, on the very highest point of Long Island. The management is as exclusive as that of the Pratt estate is open. The one is as European and monarchical as the other is American and democratic. A watchman stands within the great, forbidding stone house at the gateway and other watchmen patrol the outskirts of the grounds. Signs warning the public to keep off are mightily emphasized by the waving clubs of these guardians of the forest.

Undoubtedly the problem of keeping away from the public is one of the trials of the millionaire's life, and when he goes into the woods, buys land and builds a home to escape the touch of the "great unwashed" some means—perhaps harsh means—may be necessary for keeping the rest of the world at a distance; yet one could wish to see everywhere the same good feeling that exists between the owners of the Pratt estate and the public.

There is little about the Mackay place to suggest the gentleman farmer. In grounds as in management the idea is rather that of the feudal baron in his castle. Walking along the border either to left or right of the gate-house you see nothing but dense hardwood forest. Passing the gate-keeper and climbing a terrace you come upon a white sandstone mansion large enough for a city hall. It is still incomplete, but the hundred workmen who have been drawing and putting in place great steel beams and blocks of stone have the building ready to receive the finishing touches. There is no clear-

ing about this palace; no backyard, no lovers' lane and no garden plat. In location it is a magnificent hunting lodge set in the forest's heart; a hunting lodge nearly a hundred yards in length, lighted by electricity and provided with all the features of a city house from kitchen to conservatory.

Another unique country place in these same hills is that of the Honorable William C. Whitney. One reaches it after a drive of four miles from Roslyn. The wonder of this place is the magnificent scale on which Mr. Whitney has set about to perfect the facilities for training his thoroughbreds. The woods and the farm and the house may be duplicated in many another country place, but not so with the barn. This is so large that the buildings on City Hall Park, New York, might be stored within its walls. Under its roof is a gravel track where in bad weather the horses are exercised as though the day were ideal.

The building of a barn large enough to accommodate a race-track suggests a common feature of all this country home building by millionaires. This is the magnificent scale on which everything is undertaken, by which seeming impossibilities are accomplished and miracles performed.

Passing from the Whitney barn and the stone palace of Mr. Mackay in the Wheatley Hills to the sandy south shore, we find magnificence displayed in a no less surprising manner. At Oakdale a great stretch of sand prevented the yachts of Mr. William K. Vanderbilt from approaching the steps of the new "Idle Hour"; so the face of the country has been changed by the cutting out of a great canal to the ocean.

At the Havemeyer country place near Islip the same feature has been constructed and an artificial canal forms the Venice-like central avenue to the antique buildings.

Besides canal-building the miracle workers of the southern shore are experimenting with the redemption of barren land by drawing fertile earth to spread over the sandy waste.

These undertakings are the strivings after an ideal and as nearly as the ideal of forest and ocean, hill and plain, barren and fertile is attainable these country home builders are attaining it.

These are the homes of the very rich. But country life is loved no less by those of moderate circumstances and no doubt the man with one modest place in the country is as happy as he who has a dozen palaces. And these less pretentious homes are dotting the Island from end to end. One finds them scattered along the Sound as houses with a garden or a farm. He finds them in the woods and hills of the interior, and they fringe the bays along the south shore.

They vary in character from the pleasant little farmhouse with its surroundings of garden, field and orchard to the home of an artist among the sand-dunes,

where nothing will take root but where a certain barren rudeness of environment furnishes a most potent antidote to the artificiality and refinement of city life.

These country places are not merely homes for the summer. Here the owner escapes from the city the year around if he can. But if duty compels him to spend much of the cold weather on Manhattan Island he will still escape on Saturday. And here he defies alike the demands of city life and the roaring, bellowing forces that Nature hurls in from Old Ocean. Here he stores up the strength and courage needed to carry him through his battles with the giants of the century's end.

THE NON-CAPSIZABLE CENTER-BOARD BOAT

By Charles G. Davis

CENTER-BOARD boats have hitherto been considered the National type of America and it is pretty safe to say that, owing to the natural conditions under which most of our sailing is done, they will remain so, notwithstanding that at all the principal yachting centers to-day there is a preponderating voice in favor of the semi-fin keel.

The semi-fin keel raceabout boats, such as the *Jolly Roger*, *Scamp* and *Raider*, are examples of as near perfection in yacht building as years of gradual development can produce; they are fast in light weather, for their forms are easy and the wetted surface is reduced to a minimum; they are good in heavy weather as their rigs are small and simple; and the lead on the keels keeps them well in hand in any wind that blows. They are good boats both for the amateur to learn his seamanship on and the expert to sail, for they cannot capsize.

Neither, however, can the center-board boat capsize—that is to say, if it be a modern, up-to-date one. Few yachtsmen will acknowledge this. Yet it is a fact that has been demonstrated more than once.

The explanation, as nearly as I can reason it out, is as follows: When the old-style center-board boats, with little or no overhangs and low freeboard, heeled over, they pressed the narrow, sharp, lea-

side under water and swamped rather than capsized. Swamping was the first symptom and capsizing the result. There was so little flotation in the lea-side that the water on deck helped to capsize them.

But in a center-board boat with the modern long overhang and with freeboard abundant, the case is different; they roll up out of the water. It is an impossibility for the sails to get pressure enough on them, when laid out flat parallel to the water, to lift up in the air the lead in the bottom of the yacht, and therefore the boat screws around head to the wind and rights herself. There is so much buoyancy in the long lea-side that it can float the lead and still keep the water out of the hatches.

The old style of center-board boats when heeled would cut so deep in the water that they swamped. But the modern boat when heeled is really a better model than when upright.

There is actually more flotation in the lea-side than in the bottom of such yachts as *Genesee*. This is demonstrated by the way she lifts center-board, deadwood, rudder and all clear of the water when heeled.

To capsize such boats means that two tons or more ballast must be held up in the air on the end of a lever whose length is determined by the distance between the

center of buoyancy or flotation of the lea-side and the center of gravity of the lead, as indicated by the distance marked b on the accompanying diagram. If the distance b is 2 feet then the righting force is 4,000 lbs. $\times$ 2 feet = 8,000 foot-lbs. And the weight of the rig taken at 500 lbs. with its center of gravity 10 feet up would only be 500 lbs. $\times$ 10 feet = 5,000 foot-lbs., leaving 3,000 foot-lbs. righting momentum. This means the boat could never get her mast in the water, but would right up until the sails were exposed to the wind and they received a pressure of 3,000 foot-lbs. Then the boat

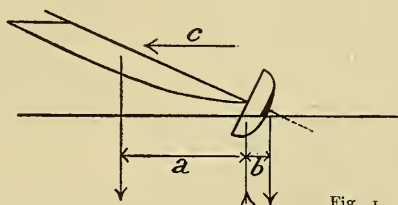


Fig. 1.

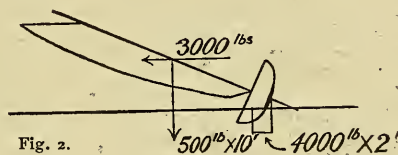


Fig. 2.

would be in some such a position as Fig. 2 and no worse off than when upright, except to scare the inexperienced hands.

In Fig. 1 the arrow c represents the wind. It can get so little pressure on the sail in this position that its heeling lever a is less than the righting lever b , for the

lead, a couple of tons, becomes very heavy when you try to lift it bodily up in the air.

What upsets a great many of the old-time designed center-board boats is the center-board. The pressure of water being on the lea-side and the pressure of the wind being on the other, each are exerting a force to turn the boat bottom up.

If amateur sailors only remember this and haul their center-board nearly all up, when caught in dangerous weather, many a capsizing would be averted.

The modern boats are not affected so much by the tripping tendency of the center-board, but the best of sailors will take up a little, say, one-third, of their center-board when caught in very heavy weather. Even if the boat is a modern, non-capsizable one, and it be not necessary, the reduction in board will greatly benefit her sailing.

THE WOODCOCK'S SAFEGUARD

PROTECTIVE COLORING, PHOTOGRAPHICALLY DEPICTED

By A. Radclyffe Dugmore

AUTHOR OF "BIRD HOMES"

WHEN the low, damp swale has thawed and there is but little chance of another snowfall the woodcock return from their winter quarters to the breeding grounds of the previous year, and after the male bird has gone through his extraordinary system of courtship, which consists chiefly of spiral gyrations in midair, he, together with his chosen partner, begins at once to examine the country for a favorable nesting site.

This is a matter of great importance,

and the selection proves how carefully the birds weigh the advantages of the many likely places. There are many points to be considered—first of all, the actual site of the nest must be dry, and in the immediate vicinity of good feeding ground. But above all things must be considered the safety of the nest from the enemies that threaten it.

To insure this the clever birds depend not so much upon the dense tangle of underbrush, which one would naturally suppose to be the safest method of protec-

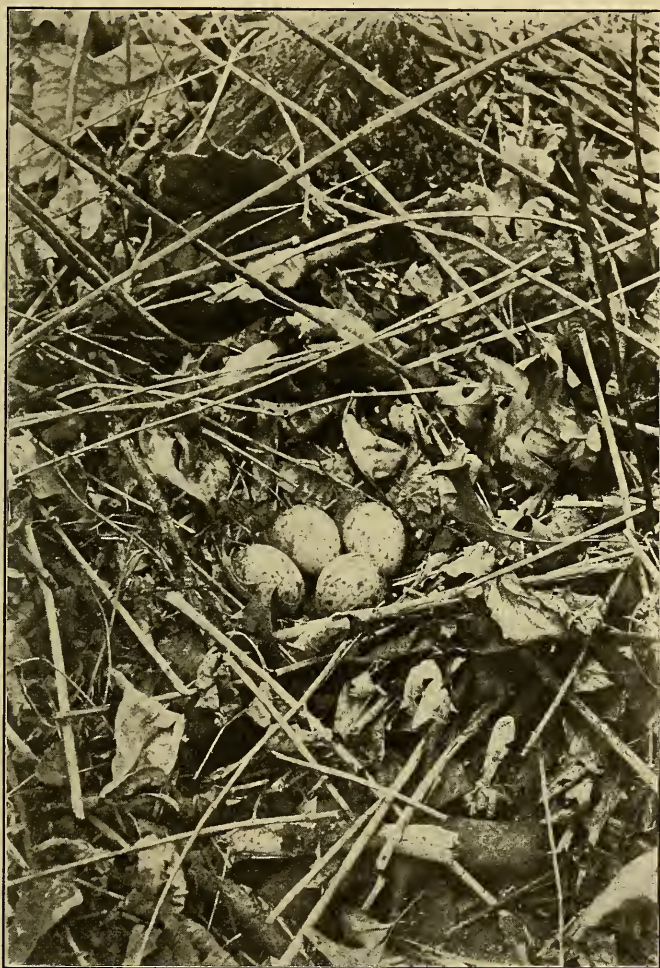


IT REQUIRES A KEEN AND OBSERVANT EYE TO DISCOVER HER WHEREABOUTS.

tion, as upon the coloring of the material with which the ground is strewn, and here it is that they show their reliance in their own protective coloring and marking, which matches so closely the dead leaves, weeds and sticks.

The reason that the nest is so seldom placed in the midst of a dense tangle is, presumably, the desire for the warmth of

The coloring of the woodcock is so closely in accord with its surroundings as to be pre-eminently protective, so much so that even when we know within a few feet of where she is sitting, it requires keen and observant eyes to discover her whereabouts. Were it not for this fact the number of woodcock in the country would rapidly decrease, for their enemies



The Colors of the Eggs Blend to Perfection with the Surroundings.

the sunshine. Every nest found by the writer has been situated so that during the greater part of the day it received the benefit of the sunlight. Whether it is that the warmth is desired by the bird itself, or for the eggs, or in order that the ground immediately surrounding the nest should be dry, it is difficult to say.

are many. Boys would take the eggs, and the hawks, apparently so numerous in the early spring, would have little difficulty in detecting the sitting bird during this bleak season of the year.

Few birds are more devoted to the cares of incubation; both the male and female take part in this painfully patient

duty, and it is seldom indeed that the eggs are left exposed to view. The coldness of the season when this duty falls on them may possibly have something to do with this, for were not the eggs kept constantly warm they would soon become sterile. When, however, it happens that the bird is flushed, Nature has provided for the safety of the eggs against marauders by tinting them with a drab color, freely blotched with dull brown marks—thus the eggs are rendered inconspicuous, as their colors blend to perfection with the surroundings. The nest itself

cently covered with snow, is still naked. The spring plants have not yet ventured from their moldy cradle, so that protection must be found among the crackling dead leaves, and to these the coloring of the young closely coincides.

Owing to the fact that the youngsters leave the nest as soon as they are free of their shells, we can readily see how important it is that they, too, should be protectively colored.

Young woodcock obey implicitly the great law which governs fledglings after they leave the nest. This law requires



Her Brilliant Dark Eye Alone Betrays her Presence.

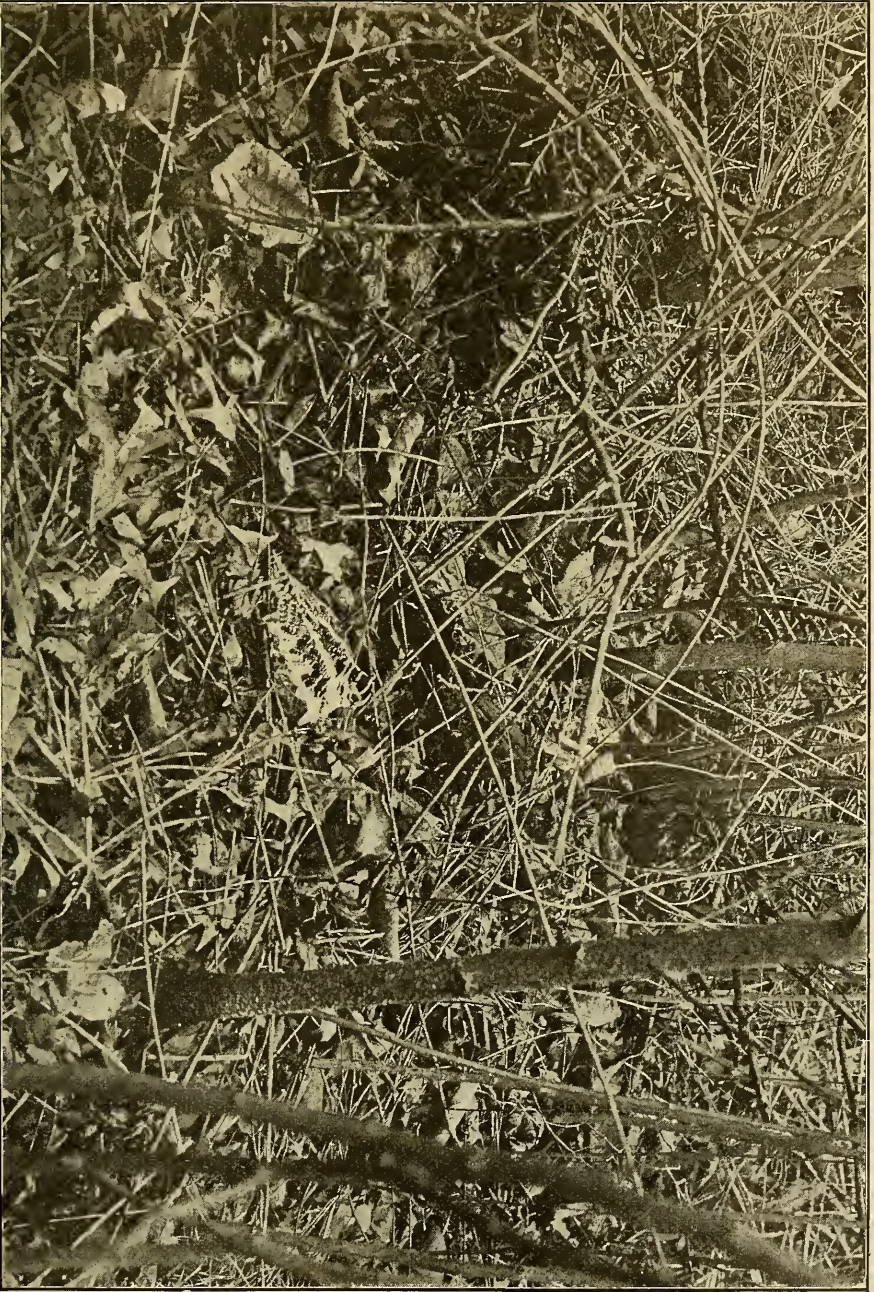
does not betray its precious contents, for, in the strict sense of the word, there is no nest—that is to say, there is none built. The dead leaves are pressed down, so that the eggs will remain together; perhaps a little down or a few feathers are added and it is complete. Simplicity itself, yet most admirably adapted to its purpose.

In the vicinity of New York the eggs are laid about the first week in April, and as the period of incubation occupies seventeen or eighteen days it follows that the young arrive while the ground, so re-

that when an enemy approaches no movement must be made. Sitting absolutely still, these little balls of russet fluff are safe from discovery. Even after the threatening danger has passed they remain motionless until a call from the parent bird informs them that there is no further need of concealment.

How well the adult woodcock is protected by its markings and coloration is clearly shown in the accompanying illustrations, which are faithful reproductions of photographs taken directly from life.

IN EVERY INSTANCE THE BIRD HAD ITS BEAK BENEATH THE TWIG.



To insure accuracy as to color values, which is a most important item and with the ordinary plate practically impossible, isochromatic plates were used in every case, together with the ray filter. By these means the relative value of the bird's coloring and that of the leaves is faithfully preserved.

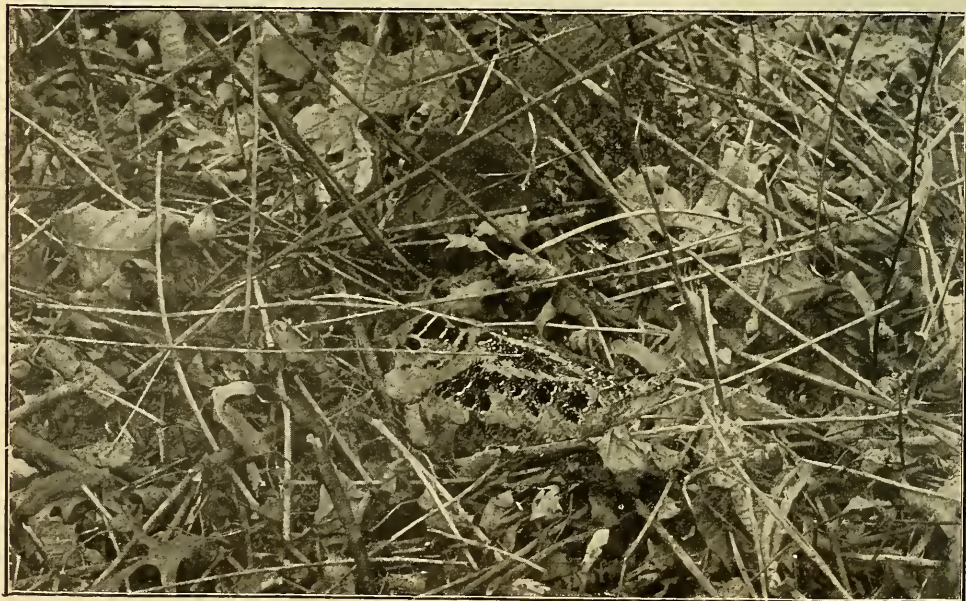
The photographs were taken on three consecutive days, and it is curious to note that in every instance the bird has its bill *beneath* the twigs. This renders her even less conspicuous than she would otherwise have been; her brilliant dark eye alone betrays her presence, even in the photograph, where she is sharply in focus, while the surroundings are more or less blurred.

It has been said that if once a woodcock is frightened from her nest by a person, she will not again allow of a human being's near approach, but will glide off silently while the intruder is yet many feet away. Such behavior, however, seems to be the exception rather than the rule. The bird here portrayed, though frightened from her nest, accidentally, of course, when first discovered, became more and more tame and confiding with each successive visit, and finally allowed the camera to be placed within less than three feet of her, with no indication of fear.

In order to show correctly the position of the eye (which allows the bird to keep a sharp lookout even while it probes deep in the mud for earth worms) and the peculiar form of the head, the camera was placed about seven inches from the ground on two stones, brought for the purpose and placed in position while the bird was sitting. As a mark of even greater confidence, she allowed the writer's hand to come within three inches of her head to remove a twig that interfered with the picture.

That the reader may fully realize how motionless the bird remained, it is only necessary to say that owing to the fact that a small diaphragm was used, the photograph taken during a shower on a dark day, and that the lens was covered with a ray filter, an exposure of ninety seconds was given and there is no sign of movement.

The question has frequently been asked, "Did she know that she was discovered?" It is probable that she did, for even with her knowledge of her protective coloration, it is doubtful whether she carried her belief in it to quite such a length. But why, may it be asked, did she sit so absolutely still? It is an unanswerable question, but the photograph is as unanswerable a warrant of the fact.



A Close Match with its Surroundings.

THE SPORTSMAN'S VIEW-POINT

By Caspar Whitney

Horse
Racing
for
Gambling.

Although far from being a prideful conclusion, we cannot challenge the truth of much of Lord Durham's recent and widely published comment on horse-racing Americans in England. Had the criticism been extended to include also the same class of Americans in America there would be even fewer exceptions to the general accuracy of his statements. Unfortunately there is no denying that the gambling element is to-day the one most in evidence. Perhaps it is going too far to say that the gambling element actually dominates American racing, but at least it is perilously near doing so.

And this state of affairs has been created within a few years, despite the existence of powerful though somewhat inactive (legislatively speaking) jockey clubs. The sportsman has been gradually giving ground to the dollar-seeking sporting man; pool rooms thrive under the corrupt New York City government, and bookmakers and touts have multiplied until they literally overrun the tracks. In a word, the class that, to quote Lord Durham, "considers horse racing merely an instrument for high gambling," has reached such numbers in America as to warrant grave doubt if the sport may be rescued from the fate with which professional baseball is threatened.

The perfectly normal result of such a condition has been the development of an astonishingly large class of men, and of women, too, who, in turf vernacular, "play the races." These are the sporting men and the sporting "ladies" of metropolitan life. They follow the seasons, from the Atlantic to the Pacific coast, and from New Orleans to Chicago. This is the class which has overflowed into England.

The salvation of the American turf rests in the maintenance of stables by such types of sportsmen as the Messrs. Pierre Lorillard, the Belmonts, the Keenes and the Honorable W. C. Whitney. Through

their influence and the Jockey Club must come the measures that will purge American horse-racing of its present ills.

Sportsmen
and
Sporting
Men.

In the days when the American turf was represented in England only by Mr. Pierre Lorillard and Mr. James R. Keene, no unfavorable criticism of American methods was forthcoming, although many important races were won from English stables. That was because these gentlemen played the game like sportsmen. But Croker introduced an element which the Englishmen had not before seen in visiting American turfmen. It was not to be expected that the leader of Tammany would, in racing horses, forsake the well-tryed and skilful tactics which he has employed so profitably throughout his political career. So also was it entirely natural that the "sports" of Tammany should follow their chief in his foreign racing venture. There were the Dwyers and others of the Croker persuasion that fastened themselves upon English racing to the discredit of the American sport, and in their wake went a flock of tin-horn gamblers, disreputable touts and adventurers.

It is not at all surprising that Englishmen have come to believe that the stables and the race-tracks of America are controlled by mercenary speculators, who conduct the game absolutely and solely with a view to money making, and have not the smallest thought of sport. Sport! Why, these men have no more conception of sport than they have of statesmanship.

There is a tremendous task before the Jockey Club if it hopes to save American racing from the condition which Englishmen believe it to have already reached. Nor can it be undertaken timidly if success is to attend the efforts. The Jockey Club, the ruling force of American horse racing, includes the sportsmen of the turf; it is quite within their province to so exercise their disciplinary power that the methods of the sporting men will not

be mistaken for the standard of the American turf.

Come
Out
of the
Glass
House,
Friend.

It is a curious psychological phenomenon that the usually self-contained and conservative Englishman almost invariably becomes hysterical when the American is under discussion. Exceptions are so rare as to give me license to say that he is never just. Either he praises us beyond our due or damns us more than we deserve. I have made some rather interesting studies on both sides of the Atlantic, and am convinced that the reasons for this paradoxical state of mind are two, (1) the American is the Englishman's most serious rival—in sport and in the world's affairs, (2) the Englishman is a bad loser—except to a fellow countryman. Among themselves Englishmen are ideal sportsmen, but they cannot with equanimity lose to a foreigner. This undeniable characteristic is part of the ineradicable tincture of his national commercialism operating in a new field. His nation has so long held the foreign trade of the world that it irritates him to brook a successful rival, even in sport.

Lord Durham's courage of conviction was praiseworthy and is commended by all sportsmen in this country; at the same time, it is to be regretted his courage did not on this occasion go so far as condemnation of native as well as of foreign unscrupulousness. It was characteristic but unfair to single out unsavory practices of the American racing men, bookmakers, touts, etc., when equally unsavory practices are common among similar classes of Englishmen. Lord Durham suffers from the national astigmatism.

I have made some very careful studies of the English turf, extending now over a period of ten years, and the only difference I have been able to discover between the vicious elements of American and English horse-racing is that the American is infinitely more clever. The English sporting man has all the desire to "beat the game," in point of fact he is the most cold-blooded reprobate I have encountered in all my experience, but he lacks the natural alertness of mind and the *finesse* to operate so successfully as the American. To that extent and no farther, is the Englishman the lesser offender of the two.

Why
American
Jockeys
Win.

But the part of Lord Durham's comment which he devotes to the American jockey descends. I regret to note, to mere tirade and discloses ignorance unbecoming a turfman of such prominence. To rant against the "intrusion of the American jockey" and to hold him responsible for either American or English viciousness, at Newmarket, is to reveal unreasoning prejudice. Even Englishmen will not indorse Lord Durham's statements on this score. In very truth, the American jockey has been a blessing in disguise—for he has been the means of upsetting and reforming old and unwise systems. The American jockey has shown Englishmen the scientific possibilities of riding; the same lesson has been given in athletics by Americans.

No doubt American jockeys have on occasion ridden foul, but that is a matter easily within correction by the English Stewards and Jockey Club. To raise that point is to question the efficiency of the authorities in control.

The real reason why American jockeys win, is because their method and style is far superior to those of the English jockeys. It is not that they care more to win, but that they know better how to do so.

Apropos of which I append in full, because the importance of the question seems to warrant it, an excerpt from a recent number of the *Sporting and Dramatic News* of London:

"Having the idea that the forward seat is the real cause, and that wind pressure, and judgment of pace acquired by riding against the watch are but side issues, though all lesser factors in the great product, a certain trainer of race-horses, who gallops his horses on the Berkshire Downs, and resides not a hundred miles from Lambourn, has recently made some most careful experiments in connection therewith, the results of which appear to be of considerable importance.

"The trainer in question had about a hundred to a hundred and fifty yards of one of his gallops carefully watered, mown, and rolled, taking a space of sufficient width for a dozen horses to gallop abreast. He put one of his lads up on one of his horses, riding in the English style, and sent the horse a six-furlong gallop, crossing the prepared patch in the course of the spin. After carefully measuring the several strides made by the horse across the patch, he then shifted the saddle forward, and the same lad—imitating as far as he was able the American seat—again took the same horse a six-furlong gallop, crossing the patch a little to one side of the track that he had made on the previous occasion. On a measure of the hoof-

prints of the second gallop being carefully taken, it was found that the stride of the horse was on the average from four to five inches longer on the second gallop than on the first. In order that there should be no mistake, these experiments were subsequently repeated with the same and with different horses, with the result that it was found that under the forward seat the stride was invariably longer. One of the horses tried increased his stride just six inches, but two out of three experimented upon averaged rather over four inches.

"The reason of the increased stride is not far to seek. The shifting of the weight forward gives greater freedom to the hind quarters, from which all power of propulsion comes, and enables the horse to bring his hind legs a few inches more under him. Four inches looks very little, but possibly when a horse has got accustomed to the altered conditions, and has developed more of that wonderful rump and thigh muscle which almost all the American-trained horses possess, his stride may get considerably longer. That good authority on the horse, Capt. Hayes, states that a fair average stride for a race-horse when galloping is twenty-four feet. Thus, in traversing a mile, the race-horse will, roughly, make 220 strides. If, therefore, he increases his stride four inches when the saddle is put forward, he saves 880 inches, or over twenty-four yards in the mile. Now, the length of a horse extended is as nearly as possible half as much again as his height, so that a sixteen-hand horse extended is about eight feet long. Taking a length at this measurement, a saving of nine lengths in a mile race is brought about by shifting the saddle forward; or, in other words, a horse is improved nine lengths in a mile by being ridden in the American style.

"The practical working out of the experiment seems to show that the secret of the American success is, in itself, a simple one. No doubt Sloan and the Reiffs, as the result of constant practice, ease their horses a good deal more than the trainer's lad did in his endeavor to copy the American style, and very possibly Royal Flush and Sir Hercules have learned to stride much more than four inches longer than they used to do when they had to carry their jockeys in the middle of their backs. But that there is a clear, definable advantage in the American methods seems to have been conclusively demonstrated."

The engagement of "Tod" Sloan by the Prince of Wales was commentary enough on the quality and comparative trustworthiness of the American jockey. It is eminently unfair, as proposed, to rule against him as a class; indeed, the future of the English turf, it seems to me, would be better subserved by offering him a professorship in a school for teaching English jockeys the art of riding. As for the hangers-on of the race-track, the adventurers of both sexes, we extend our sympathies to our English cousins—for we, too, have similar troubles of our own—and suggest, as the speediest corrective,

resort to the police rather than to harsh criticism of all things American.

**Betting
Curse
of the
Race
Track.** Had Lord Durham singled out for censure betting in particular instead of inveighing against American jockeys in general, he would have uncovered the real root of practically all race-track evils and earned the unstinted gratitude of sportsmen the world over. For among sportsmen there are not two opinions on this subject. All are agreed that in the betting is to be found incentive for all the dishonest running and riding, of which, alas! we have seen too much within the year. But America is not the only sufferer from the pest; England, France, Germany are likewise afflicted, and England has endured and striven harder than any other to keep her tracks free of it.

It must be said of England that the proportion of sportsmen among her race-horse owners is greater than that of all the other countries combined. There are numbers of gentlemen in that tight little isle who race horses for the sport, not for the money to be made, and who rarely, if ever, bet. I would not like to say how few of this kind there are in America. As yet the average American views sport as another means to a winning end; it is the exhilaration not the sport which appeals to him—rather than a sportsman, he is a partisan or a money-maker—but I must add that he is the best loser, on any count, of them all. Nevertheless, Americans who are attached to sport for sport's sake are multiplying; they are very numerous now as compared with fifteen to twenty years ago.

It would be next to impossible I suppose to abolish public betting from the race-tracks, and within proper limits it seems to have no harmful effect upon the running, but it is quite within the respective provinces of the English and the American Jockey Clubs to forbid betting to competing jockeys. There is no doubt whatever that his betting is often responsible for a jockey's dishonest riding. Here is a chance for the Jockey Club.

**The New
"America's" Cup
Challenger.** Sir Thomas Lipton is a yachtsman from whom lessons in sportsmanship may be taken with profit in both America and England. His second challenge for the *America's* Cup was

as frank and simple in language as his first. It was utterly devoid of mere verbiage or covert desire to secure some supposed advantage. To say that it was received and accepted in like spirit by the New York Yacht Club, is to record further evidence of the gratifying *entente cordial* which has characterized the relations of this sportsmanly Irishman and America's premier yacht club.

Other than that the races will begin the 22d of August instead of a month or more later as hitherto, there is no change in conditions from those governing the contest of '99. *Shamrock II* will be designed by George L. Watson, who was responsible for *Britannia*, the *Valkyries*, *Meteor* and *Sybarita*, and built by Henderson. She will no doubt be up to the ninety-foot limit (*Shamrock I* was a few inches short), and managed by Mr. W. G. Jamieson, the ablest Corinthian skipper in all England; Captain Sycamore, who was on *Valkyrie III* in the same capacity, will be the sailing master.

Sir Thomas is a shrewd man, as well as a sportsman, and learned a good bit on his first trial which will stand him in hand in 1901. Perhaps the most important of the '99 lessons concerned "tuning up," and *Shamrock II* will not make the mistake of her predecessor. She will be launched in March or April, well tried out on the other side against *Shamrock I*, and will reach America in June, in order to have ample time for fitting out and sailing in the racing waters.

No
Change
in the
Racing
Course.

Much has been written about the Cup course being changed from New York to Newport waters, but it has emanated entirely from a few gentlemen who fancy America revolves around Newport, because they and a few others have there taken up a summer residence. A few newspaper reporters have been persuaded into advancing Newport as a claimant for the race—but that is all. The *America's* Cup course will continue to be off Sandy Hook as hitherto, and a fairer one is not to be found in this or any other country. Apart from this there are two other potent reasons for not changing the course; (1) the New York Yacht Club's home waters are off New York, not off Newport, and (2) Sir Thomas Lipton naturally prefers the course off Sandy Hook.

No definite information has been given out as to the ownership of the new defender. A new defender will be built by Herreshoff and the money furnished by a syndicate of New York yachtsmen. It costs a quarter of a million dollars to defend the Cup, and individuals able or willing to spend that much money are few and far between in any country. Hence the syndicate scheme; hence, also, the lack of information, as the subscribers are not at this writing finally determined upon. When the names are made known no doubt Mr. August Belmont's will be found to be quite the most prominent in both a financial and a yachting sense. It is possible also that Mr. E. A. Willard, who handled *Vigilant* in '95 as a trial boat for *Defender*, will in 1901 manage the new defender, and that Mr. C. Oliver Iselin will sail *Columbia*.

It may be taken for granted that nothing will be left undone on this side to meet the preparations of the challenger.

Declining
English
Salmon
Fisheries.

At the close of what has proved to be a successful though peculiar Canadian salmon season, it is opportune to call attention to the disquietude in England over the discovery of their decreasing salmon supply. It will be wise, too, if England's experiences are well studied in America. Increasing population and over-netting might be thought to supply adequate explanation, but the Royal Commission appointed to look into the matter has learned that although the nets have increased greatly in numbers, yet the returns of salmon sent to market show a steady decrease, "in Scotland for a period of over thirty years; in England, Wales and Ireland for about twelve years." It is neither increased population nor over-netting that is found accountable for the decrease in the salmon fisheries, but *pollution of the waters*, which has been permitted by an inadequate law, laxly enforced.

Against polluted water no number of artificial hatcheries are sufficient to keep the salmon from decreasing. England needs, and will now no doubt get—after the damage has been done—laws regulating net fishing and stopping water pollution.

Of all the deadly ills to befall fish life, pollution of water is the most fatal and must be constantly guarded against.

Regulating Netting For Fish.

Effort is making to regulate the net fishing in New York waters, which have hitherto been guarded less wisely than is well for the healthful increase of fish life. The experience of New York is valuable to other American ports, and England's experience should also be studied very carefully by the Empire State legislators. Supply of local needs is, of course, something which cannot be interfered with, and thought of the market fisherman must therefore enter into the making of laws for port waters. This is something which game associations often ignore, and thereby really hamper their usefulness.

It would be impracticable, if not impossible, to abolish netting; it seems to be necessary to supply the market demands; but it may be with entire propriety, and must be regulated if the normal increase of fish life is to be protected. And naturally if this increase is not assured—it will be only a question of time when there will be no fish with which to supply the market. England at present is paying the penalty for insufficient attention to this very question.

In the provisions regulating netting, the game fish and what may be called the fish of commerce must both be taken into consideration; pound nets are necessary, because the fish of commerce cannot otherwise be taken in quantities sufficient to make the employment profitable; and this touches us all, because the price of fish in the market is, of course, regulated by the size and difficulty of the catch. But the game fish must have immunity all the time, and the fish of commerce at intervals often enough and of requisite duration to permit of the normal increase.

This is to be accomplished, first (and most important of all), by prohibiting the maintenance of pound nets in tide waters; second, by regulating the net's mesh which, generally speaking, should not be less than $5\frac{1}{2}$ inches, with pocket mesh not less than 3 inches, and third, by raising the pockets of the nets at regular periods and keeping them raised for at least thirty-six to forty-eight hours. With severe penalties for their infraction, laws touching all these points would be fair to the market fisherman, and yet save the port waters of America from becoming despoiled of their fish.

Still Slaughtering Birds of Plumage.

Any man who accepts the statements of the Milliners' Association and doubts that song-birds and other harmless flyers are butchered for the adornment of women, can have his beliefs changed hurriedly by a visit to the coasts of Florida or Louisiana, or to the swamps of Mississippi, Louisiana or Arkansas. In many parts of those States "plume-hunting," as it is called, is a regular winter pursuit. Blue, green and white herons, cranes, egrets, ibises, both white and purple, kingfishers, gulls, flamingos and such shore feeders are slain in thousands merely for the sake of a few feathers from each victim. There are many men, now out of the pursuit, who live upon farms purchased by this murderous use of the shotgun or small-caliber rifle, and Southern trains in dozens starting North bear feather consignments to the members of the Milliners' Association, which recently posed as an assaulted innocent. This traffic runs into tens of thousands of dollars annually, and the Audubon societies and individual bird-lovers of the South seem powerless to check it. At least, it is not discoverable that they are accomplishing anything serious.

Improved Southern Game Laws.

While the South needs more stringent game legislation, and while violators of the half-hearted laws which exist are shameless and bold, it is to be said that the spirit of sportsmanship is becoming stronger in that section, as is evidenced by the increasing number of sportsmen's clubs formed or forming, and the generally high tone of the requirements of these organizations. Nearly all of them are pledged by their constitutions to work for the protection of game, and there is no reason to suppose that they will not do their duty in the matter. It is a case of better late than never. They can do much, and much needs to be done. The effect of their campaigns is to be looked for in the work of the legislatures this winter. An interstate sportsmen's convention—to be composed of a delegate from each club in every State and to formulate legislation—would be a good thing. Such a convention would meet and do good work, if called by any responsible club in the South. A leader in the work of game protection is what the South needs.

How
Deer
May
Increase.

To judge from obtainable information, there is no State of the South in which deer are increasing and but one State of the West. That State is Wisconsin. The increase in Wisconsin is due solely to a wise law which is but half enforced, but still is much better than nothing. In the forests of the northern and middle parts of that commonwealth deer are now as plentiful as they were twenty years ago, and if the statute is continued on the books a few years longer they will have reached the status which obtained when that portion of the Union was first invaded by the desolating white man. A fishing party on the lakes of the Flambeau chain near Fiefield, Wis., recently saw forty-three deer during ten days of camping. The animals, in fact, are seen by every one who goes out after mascalonge or bass. They are no more plentiful in the Flambeau region than in other timbered parts. Farmers in Wood county, which is near to the center of the State, report that they are even sufficiently numerous to be damaging to crops. The law prescribes that no man shall kill more than two deer in any one year, and the shooting time is limited to November 1st-20th. It may be said that this law is violated constantly by residents in the more thinly settled sections, yet they shoot only for meat, and the harm they do is not to be compared to the destruction wrought by visiting squads of "pot-hunters" when they are permitted to come in. The beautifully deterrent effects of the Wisconsin statute are an earnest of what may be done in this direction in almost any American commonwealth.

Game
Violation
in the
Adirondacks.

Any one who has spent a considerable length of time in a section of New York State where game abounds, knows that the chief game-law violators are not hunters from the city, but natives. The "city man" in the mountains is never quite sure enough of his ground to violate the law safely. He never knows when a game "protector" may be within the sound of his gun. But with the native it is a different matter. He learns to know just about when and where the local protector is to be found, and when he wants to violate the law he can do so more or less safely. He kills a deer when he needs meat, whether it is during

the open season or in midwinter. When he wants trout he catches them, sometimes honestly, and sometimes with a bunch of hooks tied back to back on the end of a pole. These he lowers to the proper position below the trout, and then with a quick jerk lifts the fish out of water.

The tales one hears in the Adirondacks, for instance, show conclusively that the average native is lawless. In some of the more remote hotels it is not uncommon to see trout under six inches in length served openly at table. When the matter is mentioned to the violators of the law, the invariable reply is that small trout are as good to eat as large ones. Likewise, one who spends enough time at these interior hotels will be offered venison in midsummer. The stories of illegal deer-shooting range from the comparatively innocent killing of an animal by a mountaineer with a hungry family to the wholesale slaughter of a herd in yards.

When the native discusses the matter he confesses that what he would fear is a change providing a resident "protector" or warden in every township. Then these officials would be too numerous to avoid, and violation of game laws would be dangerous. Game Commission take note!

Good
Roads
and
Good
Government.

A practical illustration of the costliness of building poor roads or of failure to keep good ones in repair, is furnished by present roadway conditions in Cuba. During the four hundred years of Spanish rule the public roads were persistently neglected, and good throughfares are therefore now one of the prime essentials to Cuba's industrial awakening. The American régime is showing its appreciation of the situation by planning the construction of a network of good roads which must to a gratifying degree serve the prosperity of the island. To carry forward this work and repair the neglect of the Spaniards an outlay of no less than thirteen millions of dollars is estimated as needful.

There is no colonial administration so wise as the one which among its very first official acts looks to the building of good roads. The most impressive example of this I ever encountered in my travels was on the Malay Peninsula—undoubtedly a more satisfactorily governed foreign possession than any on England's long list.

From an unexplored wilderness occupied by a hostile people, the English in an astonishingly few years settled up the interior and gained the fealty and confidence of its inhabitants. And the procedure that accomplished these results included (1) opening the country by the building of good roads—thus stimulating native industry and making travel possible and easy, (2) spending the revenues of the country for the improvement of the country—thus increasing the value of the possession and inspiring native confidence in their good intentions.

The American Administration in the shaping of its territorial policy concerning the Philippines and Puerto Rico, and, for Cuba so long as it is in our care, will do well to closely study the methods of the British in the Malay Peninsula.

**Criminal
Accidental
Shooting.** What are we going to do with these people who go into the woods and shoot other people whom they mistake for deer or other wild animals? Must every man who goes a-hunting wear a coat so vari-colored as was Joseph's, for assurance against being shot down by some irresponsible creature who has wandered afield with a deadly weapon? Or shall we have a law enacted by State legislatures making the shooting of a fellow creature under such conditions a crime punishable by several years confinement in the penitentiary?

We call this accidental shooting; but it may be more correctly described as hysterical shooting. There is literally no excuse for such accidents. They happen because men of hysterical, timid natures, who have had little or no experience with a rifle, or in hunting, are permitted to go into the woods without a keeper. There is a very large class of the public that appears to believe neither experience nor skill requisite to hunting; men whose sole acquaintance with the woods and wild animal life has been acquired in the home park and menagerie, and who go forth armed *cap-a-pie* with their emotions at half-cock and nerves on edge. These in their inexperience and nervous tension blaze away at the first moving thing that catches their eye. Moreover, there are some men who are not to be trusted with even a safety razor.

A single and simple injunction which will stop all such criminally accidental

shooting is—Never under any circumstances or in any country, shoot until you see and know at what you are shooting.

**Izaak
Walton
Memorial.** Disciples of the gentle art of angling will be interested in learning that a movement is afoot in England to erect a memorial window to Izaak Walton in the Winchester Cathedral, and the suggestion has been made that perhaps there are American anglers who would like to contribute to the fund which is being raised for the purpose. If so, contributions of any amount will be gratefully received and acknowledged by the Honorary Treasurer of the fund, Mr. F. Bowker, Jr., 17 Southgate street, Winchester, England. The proposed window, to be designed by Mr. C. E. Kempe, an eminent artist who already is responsible for five other windows in the cathedral, will cost about two thousand dollars, and will replace the large window through which the light of day now falls upon the plain flat stone marking the grave of Izaak Walton in one of the side chapels of the south transept.

We certainly indorse the plan. Izaak Walton was a man of good character, and a delightful and wholesome writer.

**Intelligent
Game
Protection
Profitable.** It is very reassuring to sportsmen and those others who have labored in the cause of fish and wild animal and bird life protection, to note the closer and more intelligent supervision with which game wardens are attending to their duties. No doubt local opinion has a great influence, one way or the other, on the men whom the State's Fish, Game and Forest Commissions employ to enforce the laws. Therefore I have always believed very strongly in the efficacy of missionary work. It is my opinion that the Federal Government could do nothing of more vital and permanent value for these interests than to establish a bureau for the sole purpose of enlightening the people of the Union on the material importance to them of protecting certain wild animal and bird life, and of preserving the forests. There is no way so sure of appealing to the average man as through his pocket. And convincing examples are plentiful.

Just recently some very thorough investigations have been making in England in fruit-raising districts where birds

are protected, and in fruit-growing districts where birds are not protected. The invariable results show a very considerably increased crop of fruit in the districts where birds are protected over those districts in which no protection is afforded birds. Similar experiments with flowers have developed similar conclusions. All of which goes to show that although birds do a certain amount of mischief, especially in dry seasons, yet caterpillars and worms and insects do a great deal more damage at all times. Birds are a good investment to the farmer and gardener; they amply pay for their protection.

**Some
European
Lessons.**

What may be accomplished by protective and preservative policies carried out with sound judgment and with courage, is instanced by experiences in Europe, where the economy of life must be studied closely and followed faithfully.

The community at Orsa, in Sweden, has, in the course of a generation following upon previous generations of forestry preservation, sold nearly five million dollars worth of trees, and, by means of judicious replanting, has provided for a similar income every thirty or forty years. In consequence of this commercial wealth there are no local taxes, and schooling, telephones and many other things are free to the people of this wise little community.

There is perhaps no region in the world where so many birds of song and plumage are slaughtered to satisfy millinery demands as in Northern Italy and on the Swiss border. Thousands upon thousands have long been annually trapped in their pilgrimages north and south. One of the devices is "to cover the limbs of trees, the rocks, and even the telegraph wires along the line of bird migration, with a paste of such adhesive quality as to hold the birds captive, when they stop in their flight for food or rest." Switzerland has a strict law against the trapping or killing of song birds or the molesting of their nests in any part of the Alpine republic; and it is being vigorously enforced, as may be surmised by the fact that in the past year the border police "have captured and destroyed 13,000 bird traps." Bird catching and killing are being dealt with seriously by the Swiss courts, and an effort is making to arouse equally rigorous action in Italy, with appreciable results. I cite

this lesson at length, because nowhere else have the friends of bird protection met and overcome such obstacles.

**How to
Secure
General
Game
Protection.**

If one of the most marked improvements in American game and fish protective work is the activity of game wardens, certainly the magistrates of the law are so often unsympathetic as to almost class themselves with the farmers in unfriendliness to the cause. This is passing strange, because the magistrate ought to be, and more frequently is, a man of some education—and it is hard to see how such a one can fail of being wholly in sympathy with game protection.

There is the law, of course, to guide him, but as the umpire in baseball seems always to favor the runner, so the magistrate appears always to interpret the game law with the welfare of the offender, rather than of the Commonwealth, in view.

It is, therefore, a pleasure to record the decision of Justice Gaynor of Brooklyn, favoring the State in the suit of Game Warden J. Warren Pond against Charles H. Cone, a fish dealer, who had exposed trout for sale in the close season. Cone set up the defense that the trout had not been caught in New York.

The decision and the wholesome influence of this case upon dealers suggest unmistakably the surest—the only sure way, in fact—by which we may secure genuine protection for game, *viz.*, by prohibiting its sale or exposure during close season, regardless of whence it came. Such a law generally adopted and enforced, and the various State game laws agreeing on seasons, would accomplish most effectual protection.

**Skipper
Parker
Acquitted
of Blame
by his
Employer.**

It would give me much pleasure not again to refer to the seventy-footers of 1900 and the muddle and disclosures which marked the closing of their racing season (for there appears to be a bewildering number of wheels within wheels), but I must in simple fairness publish the letter of Mr. Cornelius Vanderbilt, owner of *Rainbow*, written under date of October 12th to Captain Parker, who sailed *Rainbow* and was charged by Mr. Herman Duryea, who sailed *Yankee*, with having surrepti-

tiously ballasted *Rainbow* after her official measurement.

"As Mr. Duryea has not published my answer to his letter of September 29th, it is only fair that you should be informed of the fact that I therein acquitted you of all blame, and stated the extra ballast was put in the *Rainbow* by my order, and I wished to assume the responsibility myself."

According to this letter, Mr. Duryea at the time he made his charges public had in his possession Mr. Vanderbilt's assumption of responsibility for *Rainbow's* yachting lawlessness. The letter not only accentuates the remarkable ignorance which ruled aboard *Rainbow*, but brings to Mr. Duryea's door a charge of unsportsmanly conduct which certainly demands explanation.

**A
Revelation
of American
Mechanical
Enterprise.** The Madison Square Garden Automobile Show was a remarkable exhibition of American enterprise and mechanical ingenuity. It was more. It was a revelation of the marvelously progressive spirit of the country. One year ago, although much laboratory experimenting was making, there was no automobile industry as such, and scarcely a manufacturer with machines for delivery. In the Garden, the second week of October, about seventy manufacturers were represented by upwards of three hundred styles of machines, valued in the aggregate at about half a million dollars. The motor vehicles ranged from a \$4,000, three-ton, twenty-horse-power steam omnibus, capable of carrying eighteen passengers, to a 125-pound bicycle, with a gasoline motors of $2\frac{1}{4}$ horse-power and costing \$275.

Between these extremes were trucks, delivery wagons, tricycles, quadricycles, victorias, drags, surreys, stanhopes, coaches, cabriolets, hansom, racing machines and runabouts. And the runabouts—averaging in weight about 950 pounds and in cost about \$750—was the class which attracted quite the greatest attention.

Nearly all the vehicles on exhibition were of American make, and went to prove that, so far as the carriage itself is concerned, the native outclasses the foreign builder. In motor building, especially in gasoline, the American manufacturer has not yet attained the eminence

which another year no doubt will bring him. The majority of the motors now used are of French, German or English make. In steam machines, however, it is a question if the American make is not, even now, at the very top.

In comparing the American and foreign made automobiles, the superior superstructure of the American is apparent at a glance; it is lighter, stronger, better made, better finished, much handsomer and the motor is disposed so as to produce less vibration than is the case with the foreign built vehicle. The coloring of the American carriage is rich and tasteful, now that it has broken away from those painfully violent, if traditional, yellows and reds with which the first machines were dammed.

Despite the great strides made in manufacture, it is evident that neither American nor foreign builders have yet learned where to dispense with weight wisely. A not-at-all surprising fact, however, for the refinement of a machine comes last, as we saw in the development of the bicycle. No doubt there will be a spasm in the direction of extreme light weight machine building, but prospective purchasers will do well to remember that there is too much vibration in the motor-driven vehicle to permit of delicate structure. Some of the old battles we went through during the bicycle's evolution, as to wheels and spokes and tires, are being waged over again; articles put forth during the zenith of the bicycle show as novelties, and discarded, are again reappearing for the consideration of the automobilists. But the net result, as evidenced by this the first important American show, puts the home-made article in the very front rank.

America was slow in adopting the automobile, but the progress of the industry, once started, has served to emphasize the alert mind and rapid hand of the native mechanic.

**The
Madness
for
Winning.** Sometimes I wonder if the day will ever come when we shall see the present frenzy for mere competitive success replaced at our universities by a genuine spirit of sport for sport's sake.

It seems to be so hopelessly far away! To win has become such a mania as to spread its delirium over the senses of

nearly all those who have to do in one way or another with the annual upbuilding of a college football eleven. Faculty members and *alumni* advisors make sportsmanly rules, only too frequently to stretch them to the breaking point when their enforcement threatens the strength of a team; to discover an offending candidate is to forthwith seek special dispensation in quantity commensurate with the quality of the player. The present season, both in the East and in the West, has given more than the usual evidence of this tendency, and unfortunately the examples are furnished by some of the more prominent universities.

Apart from supplying teams with men ineligible according to the accepted canons of college sport, this madness has also revealed itself on the side lines during match play. Despite the especially prepared ruling against more than five men of either competing team being on the side lines, Pennsylvania is the only one of the large Eastern universities which has respected it. Princeton not only disobeyed the rule, but permitted her coaches to engage in a disgraceful wrangle with the officials at the Columbia game. Princeton coaches have offended so often that the university must be held responsible; and the university must answer also for the obvious tendency of the 1900 team to rough play—for this also comes straight from the coaches. There needs to be some further ruling on this matter. When the Rules Committee next meets, it should change the present rule, so that only five men of each side be permitted inside the enclosure—by actual personal count there were seventy-eight men, exclusive of substitutes, on Harvard's side line benches at the Pennsylvania game! If men are permitted on the side line benches, some of them are certain to be on the side lines when the game begins. Then, too, power should be given the referee to order off the field, under penalty of game forfeiture, coaches who make themselves as obnoxious as did those of Princeton at New York on Election Day.

Two other rules the Committee can make with much profit to the game; first, prohibiting hurdling—a dangerous play and one calculated to incite slugging, and, second, insistence on seven men being in the rush line when the ball is snapped. This will open the game, increase its in-

terest, and improve the general quality of individual work.

Unity
Among
Colleges
Desired.

But the most imperative present need to the game's wholesome conduct is agreement among the leading universities on standard rules. There may be local conditions necessitating immaterial differences, but there can be and are no local conditions which preclude agreement on the broad and vital question of eligibility. Last year faculty representatives from Harvard, Princeton, Pennsylvania, Columbia, Cornell and Brown met in what has come to be known as the Providence Conference to discuss the needs and to formulate desirable rules for the wholesome conduct of college sport. The suggested rules of this Conference, are complete yet simple and praiseworthy in every particular. They are a standard for the government of college sport, wherever it may be found, and should be universally adopted. There must be a common standard, otherwise each year will bring its quota of misunderstandings and bitter discussions.

Perhaps no year has emphasized this need more than the current one; for there has been much discussion, and all of it the direct result of that winning madness. Pennsylvania has played McCracken, who, although a man of high character and a good student, was ineligible under the letter of the Providence Conference rules, as well as under the spirit of the four-year rule as understood at Harvard, with whom alone Pennsylvania has been concerned for several years. McCracken, in playing on the eleven, represented Penn. for the fifth academic year, his first being on the '96 track team. Penn. has excellent rules; indeed, she and Harvard have been the leaders in this respect during recent years; to have perverted the four-year rule this season was a blunder second in seriousness only to that of clinging to the belief that one coach and one play (be they never so skilful) can make a well-rounded, first-class eleven.

Chicago
as usual
is an
Offender.

Chicago more than any other university in the West has violated the spirit of college sport rules, and yet through seeking refuge in some unexplored technicality repeatedly has managed to escape a richly deserved penalty. Every year some of-

fense of this university is laid bare, and every year President Harper exploits himself and Coach Staggs in the columns of the Chicago press as victims of misplaced confidence. It is an old and a worn-out plea. It seems hard to believe that either the President or his Athletic Director is so stupid as their annually published statements would suggest.

The offense this year consists in playing on the eleven O. E. Atwood, who left Ottawa (Kansas) University in December last as a Sophomore, after having played three years on the Kansas college team. To play this man, as has been done in the majority of Chicago games, is a direct violation of the rule expressly drawn for the very purpose of checking the migratory player. The other Middle Western universities should decline to schedule Chicago until her sponsors show a willingness to play fair. That her team should have been thoroughly and repeatedly beaten this season appears retributive justice.

Wisconsin is also an offender this year—not that violation of the spirit of the law, or, indeed, of the letter, is entirely strange at Madison—but I thought the lessons of a few seasons ago more far-reaching. Riorden, who is playing guard, was graduated in '98; he had played only three years, and so now in 1900, his *alma mater* being in want of a good guard, he returns to supply her needs, and to flagrantly violate the spirit of college sport.

Some unequivocal rules are required to check this kind of man, and, to cite possibly parallel cases in the East, to protect college sport against such contingencies as the return of Sheldon to Yale, and the prospective return of Baxter and Tewksbury to Pennsylvania.

Chasing Shadows at Yale.

It is a long time since there has been occasion to call Yale to account for ethical shortcomings, but the playing of Sheldon this year is a violation of the spirit of college sport which cannot be overlooked. The fact that no rule of Yale appears to be broken in giving him a place on the eleven suggests a falling-away from traditional standards which must be rather alarming to the *alumni*. According to the standard adopted by all universities having consideration for the healthful conduct of their sport, Sheldon is ineligible on two counts; first, he was a "dropped student" (*i. e.*,

had failed to be advanced with his Freshman class) when he left Yale in the autumn of '97 or spring of '98; second, in the two years intervening between leaving Yale and returning this autumn he has been a member of the New York Athletic Club track team, has lived for periods at the club's training table and won prizes in open track games. To be again eligible for a college team he must reside a year at the university and pass examination on a full year's work. His acceptance at Yale as a 'Varsity candidate is the most surprising occurrence in that university's recent athletic history. In my opinion a man who has been out of college a year should never again be eligible.

President Hadley, who since his election has been modernizing the university curriculum, will find, I am sure, further room for reform on studying Yale's athletic rules—if he can find them. I have tried for ten years to secure Yale's rules and to date have not succeeded. The spirit at Yale has always been excellent and on that account the teams have been usually above criticism, but the rules are very deficient. Last year and this the spirit seems lacking also. Otherwise how can we account for Quinby on the nine in '99, for Sheldon on the eleven in 1900, for high jumper Spraker's attendance or Messrs. Cook, Robertson (captain of the nine) and Blagden (captain of the crew) playing this summer on the Paul Smith hotel baseball team—a regular "summer nine," with gate receipts, hotel privileges, etc. Every other university except Georgetown forbids summer hotel nine ball-playing to its athletes; every one of the more important Eastern universities—Harvard, Pennsylvania, Princeton, Columbia, Cornell, Brown—all save Yale, have eligibility rules in sympathy with wholesome sport. What Yale needs is a faculty athletic committee patterned after Harvard's—an official athletic head and some tangible rules.

Princeton with Yale only has a side arrangement which extends the four-year playing rule, but Princeton's rule against "summer nine" playing remains intact and was therefore violated by permitting R. Tipton Davis to become a football candidate. Davis played on the Atlantic City nine this summer under the name of Tipton, and thus ostracized himself from college sport.

UNIVERSITY FOOTBALL

AT the date of this writing (November 10th), the climax of the college football season is approaching, and but one of the so-called "big games" has been played. It would be idle, therefore, to undertake more than to make permanent record of the most important Eastern games played between October 17th and November 10th, and discuss the general causes which fixed their results. A review of the season as a whole will be given in the next issue.

YALE.

Oct. 17th vs. Bowdoin, 30—0, 20 and 15-m. halves.
Oct. 20th vs. Wesleyan, 38—0, 25 and 20-m. halves.
Oct. 27th vs. Columbia, 12—5, 30 and 25-m. halves.
Nov. 3d vs. West Point, 18—0, 25 and 20-m. halves.
Nov. 10th vs. Indians, 35—0, 30 and 25-m. halves.

YALE's playing against Bowdoin and Wesleyan was capital; in fact, quite near the old Yale standard. This was due in a measure, no doubt, to the comparative weakness of her opponents, and also to the inherent power of this particular Yale team. In simple physical capacity its equal has not been seen in New Haven in years. The Columbia game, however, laid bare several serious defects, among them lack of speed and accuracy. In the first half, Yale actually failed to make a first down until eighteen minutes of play had expired. She was slow in charging, fumbled, punted poorly and the men did not help each other. When finally they pulled together, however, their great power made things hum, the ball being repeatedly carried almost the length of the field in irresistible dashes. The ends were not strong—far below the Hinky-Greenway standard—being drawn in or pushed out of the plays, and not infrequently missing their tackles completely when they did get near their man. Weeks scored for Columbia first in a fine 57-yard run through Hamlin's and Coy's side, in which Brown was held "lashed to the mast" by Beardsley and two other Columbians, and Hamlin was boxed by Van Hovenberg.

In the second half, Yale, in desperation, brought out one or two formations which she would as lief have kept in the dark, and by them scored two hard-earned touchdowns.

One of these was an application of the Woodruff principle of heavy weight plays.

A tackle or guard is drawn back of the line and thus adds to the power of the attack. The play, however, differs radically from the "guards back."

The Indians were beaten with absurd ease, partly because they had passed their playing meridian and partly because Yale was within a week of her Princeton game, which will probably be rather easy.

AT West Point, Yale's score of 18 points was 11 points less than that of Harvard two weeks earlier, an inconsequential matter, so far as the mere figures go. Yale's defense was much stouter than Harvard's, even if her attack was less effective. The latter was slow and ragged much of the time. Chadwick's work has been the most consistent and successful, although he is lighter than Hale. The latter runs higher and starts slower and will gain less ground against a strong defense.

HARVARD.

Oct. 17th vs. Bates, 41—0, 20-minute halves.
Oct. 20th vs. West Point, 29—0, 20-minute halves.
Oct. 27th vs. Indians, 17—5, 25-minute halves.
Nov. 3d vs. Pennsylvania, 17—5, 35-minute halves.
Nov. 10th vs. Brown, 11—6, 25-minute halves.

WITH her two expert ends, Campbell and Hallowell, with Lawrence, tackle, and her splendid back-field, Daly, Kendall, Sawin and Ellis, all left over from 1899, it is no wonder that Harvard's team is strong this year. In addition to these, Burnett, a regular man of last year, is only a substitute this year, because his place is better filled by Sargent, a man who has now had three years of Lewis' coaching. Eaton, who has been substitute for two years, took Donald's place, and might have made it last year, for Donald was the weakest man in the Harvard line in 1899. Burden's position is better filled, and the only man really missed is Boal, guard. With not an underclassman on the team, therefore, Harvard men should have been better prepared than they proved to be for a well-drilled eleven, proficient in general football knowledge. The schedule was admirably planned to develop the team, step by step, the coaching of the best, and only favoring gales have swept across Soldiers' Field this autumn.

AGAINST West Point, Harvard was powerful although slow, but even then it could be seen that the team was "coming." The scores were easily made, chiefly on the end plays which Sawin and Kendall subsequently hurled at Pennsylvania in more finished form. Putnam, Kernan and Stillman, the sub-backs, showed that they could take the places of the regular men and not affect the play unfavorably.

AGAINST the Indians, a week later, came one of the trying-out experiences so discouraging at the moment, but so wholesome in its general effects. The Harvard team was put to just the mental and physical test which it needed. Strange formations made large gains and showed the men that their goal line was not invulnerable. The mental strain of looking for the

unexpected, the rude shock and keen anxiety, the subsequent brace-up and get-together, in the face of threatened disaster is indispensable mental discipline for a team just prior to one of its great games, and all this the Indian game furnished, putting the team into the coaches' hands in the best possible condition for the final week's drilling. That the team "found itself," as Mr. Kipling would say, every one now knows.

Its game against Penn. was intelligent, fast, coherent, mighty. Its opportunity came quickly, for Graves, the Penn. quarter-back, fumbled a kick early enough in the game to take his team's nerve and transfer it, as though by double entry, to the Harvard team. A good start has always meant more to a Cambridge team than to any other, and Graves' contribution to his opponents' subsequent playing spirit was no mean one.

Harvard's team was nevertheless clearly better, both in attack and defense. It was shifty, nervy and strong. In advancing the ball, its interference was swift to form, compact and well-timed, thanks mainly to Daly, whose greatest services to his team were along just that line, even though his punting was excellent and his dodging runs superb. In defense, speed preceded power, and "guards back" was solved in the only possible way. The secret of any team's success must ever lie in "getting the jump" on the adversary. In meeting "guards back" is this more particularly true. Wait for it to reach the line and it will certainly gain its distance. Nip it before it can gather full headway and it has no chance whatever. For three years it battered out victories against Harvard, but, thanks to Mr. Lewis, this Pennsylvania Samson has been shorn of its locks. The opportunities for getting through on this play are better than they would be against any system where the line is left intact. The tackles are moved in to support the center rush, so the defending side has its own tackles practically free, as well as the rush line backs. To charge through and meet the on-coming file of attackers was the task which Mr. Lewis gave his men, and right well have they done their work these three years. If Columbia and Princeton could have afforded the time to have practiced this line of defense against the Penn. and Lafayette teams, respectively, Columbia's defeat would have been less pronounced and Princeton's victory much more decided; but as it is a style of play which neither Columbia nor Princeton has to meet in the games for which they care most, they spent little time upon the problem of resisting it.

AGAINST Harvard, "guard's back" gained but little, and Mr. Woodruff had nothing else to offer in its place. On the other hand, his extreme notions in regard to his guards and their work quite crippled them in defense. You cannot make them do the work of the backs and ends and leave them good for much when it comes to the discharge of their legitimate duties. That is the sole reason why Hare, heroic player as he is, and the best all-round man on any field this year, was opened up so often for gains—a sort of Ellis Memorial Gateway, one might say.

PENNSYLVANIA.

Oct. 17th vs. State (Pa.), 17—5, 20 and 15-m. hlvs.

Oct. 20th vs. Columbia, 30—0, 25-minute halves.

Oct. 27th vs. Chicago, 41—0, 30-minute halves.

Nov. 3d vs. Harvard, 5—17, 35-minute halves.

Nov. 10th vs. Lafayette, 12—5, 27-minute halves.

(NOTE.—The time of each half in the Penn.-Brown game, October 13th, was 25 minutes, not 20 minutes, as announced in OUTING for November.)

AGAINST State College, Penn. did not play Wallace, nor, in the first half, Captain Hare; but State's touchdown was the result of misplays with which the absence of these two men had nothing to do. "Guard's back" did not work well, and State's stout defense shortened up the gains so that only three touchdowns were made.

As intimated above, Columbia's first contact with the redoubtable Woodruff play found her totally unprepared to meet it and Penn. had an easy time getting her men started. Once reaching the line they ploughed through like troopers in a cornfield. The result was quite as disastrous to them, however, as it was unnerving to Columbia, for they built air castles on the great strength of their team, failing utterly to allow for the visitors' lack of familiarity with the play.

AGAINST Chicago, their easy victory tended to strengthen their false sense of security, although Mr. Stagg, having met "guards back" twice before, should have been able to have devised a more effective way of checking its ravages; but as his team is inherently weak this year it could hardly have executed any method of resistance effectively.

It will thus appear to the reader why and how Pennsylvania was overconfident as to the Harvard game. Depending almost entirely upon the supposed irresistibility of their offense, they worked up no other method of attack to supplement or supersede it, and, what is worse, not only neglected the cultivation of an adequate system of defense, but also failed to drill the men properly in the fundamentals of football—the primary school work, as it were. Falling on the ball, handling kicks, etc., have

been characteristically weak points in Mr. Woodruff's teams, his theory being, apparently, that so long as no team could stop his advance, their importance was minimized; but with the solution of the "guards back" problem, every such weakness naturally counted against Penn. with double force. There will have to be some brushing up on first principles at Franklin Field next year.

PRINCETON.

Oct. 17th vs. Syracuse, 43—0, 20 and 15-m. halves.

Oct. 20th vs. Lafayette, 5—0, 25 and 20-m. halves.

Oct. 27th vs. Brown, 17—5, 25-minute halves.

Nov. 3d vs. Cornell, 0—12, 30-minute halves.

Nov. 6th vs. Columbia, 5—6, 30-minute halves.

RUB your eyes and look again; for when has it befallen a football leader to be buffeted thus by teams other than the so-called "Big 4"? Yes, Princeton has been weak this year, very weak, but she has strong material, fine spirit and she is building for the future. She will be heard from with most of those same men later on. We hear much of "green teams" from time to time, to some of which, at least, the adjective does not properly apply. A Harvard coach, for example, referred recently to the present *green team* at Cambridge. He is a rare wit, that fellow. Yale's '97 eleven was another (it contained 3 post-graduates, 3 seniors, 2 sophomores and but 3 freshmen, all of whom had enjoyed unusual football advantages), and there have been Princeton teams similarly misnamed. But this one is the real article. Think of losing 9 regulars (all strong players) and 5 first substitutes and having only 2 regulars and 4 first substitutes with which to resume operations. Is it any wonder that the scores in the preliminary games have been close and that against the well-rounded Cornell and Columbia teams the new men were fairly outplayed and beaten? They have volumes of football to learn at Princeton this year, but they are learning it courageously. It may not be acquired in time to bring victory in the one game for which they care—Yale—but it will tell in 1901. It is an experience which overtakes all of the big fellows now and then, and Princeton is having her turn, only she is catching it a little heavier than ever before, and will get harder knocks than usual ere she resumes her place.

THE strong Lafayette team, skilfully and quickly molded out of much new material and some veteran stuff by Dr. Newton (Amherst and Univ. Penn.), gave Princeton the first hard rub at Easton, fairly outplaying her in the first half, thanks to "guards back," which, by the way, was better executed than Penn. itself had done it up to that time. Brown next pushed

the men of Nassau around the field in the first half, their score, however, being obtained on a place kick and not through a touchdown.

THEN came the splendidly coached Cornell team, using a combination of weight plays starting back of the line and very cleverly managed double passes just at the right moments, and securing two touchdowns in the first half. Starbuck's head work in these performances was notable. He reserved his fire until within striking distance each time. When the Princeton back finally muffed the wet ball on kicks, he put in his heavy work successfully.

AGAINST Columbia, three days later, the new line went through another blistering experience, the Columbia team, having had no scheduled game for ten days past and being carefully drilled for that hour, sweeping the Princeton forwards resistlessly back for steady gains all through the first half.

This, however, is the significant feature of all Princeton's games, and shows conclusively how her men have been learning and learning, game after game. Her second halves have invariably been better than her first. Instead of going to pieces under each different kind of cannonading, her men have kept at it harder than ever, improving all the while, thickening up their own defense and giving occasional flashes of future power in attack.

In the second half of every game, spirited rushes, well concerted, showed the possibilities in the men. The Lafayette game ended with the ball in Princeton's hands on Lafayette's 2-yard line; at Brown the defense was a hundred per cent stronger in the second half; against Cornell, Princeton repeatedly swept the ball down the field, although she could not get it over; against Columbia, the ball was also in the latter's territory for 25 minutes of play out of 30, and her rushes made Columbia look as inferior as had Princeton in the first half.

Lack of space makes it necessary to defer until the general review of the season comment upon the notable strides made by Cornell and Columbia, and the progress made in the other colleges, among the most important of whose games may be mentioned:

Hamilton, 12; Williams, 0.

Oct. 27th—Cornell, 23; Dartmouth, 6.
West Point, 6; Williams, 0.
Annapolis, 15; Lehigh, 0.
Trinity, 5; Wesleyan, 0.

Nov. 3d—Annapolis, 18; Wash. and Jefferson, 0.
Wesleyan, 16; Dartmouth, 5.
Lafayette, 35; Lehigh, 0.

Nov. 10th—West Point, 11; Hamilton, 0.
Annapolis, 44; State, 0.

THE general tendency throughout the Middle West has been to develop the defense at the sacrifice of the offense. As a result, scores have all been small and the teams lacking in power to advance the ball, but no doubt the closing weeks of play will see improvement, especially in interference; for the greater part plays have been directed at the center, with a scattering end run here and there.

Oct. 14—Minnesota, 6; Chicago, 6.
Oct. 20—Minnesota, 38; Grinnell, 0.
Nov. 3—Minnesota, 6; Wisconsin, 5.
Nov. 10—Minnesota, 23; Illinois, 0.

Minnesota and Illinois have shown improvement on their form of last year; especially Minnesota, which has not in recent years been a factor in Middle Western football. It outplayed Chicago (although the score was a tie, 6 to 6,) and showed a style of play best adaptable to the heavy material of which it has always had an abundance. Minnesota's defeat of Wisconsin, 6-5, was a great and deserved triumph for the former. It is too bad they do not play Iowa, as the Western championship may now be said to rest between them.

Illinois material is usually light and their mode of attack therefore more open—directed at the opposing tackle and around the ends. But this and a lack of hard games proved a serious handicap in meeting an opponent of nearly equal skill—for example in the Northwestern game (a tie)—Illinois could not score although the play was mostly in the Northwestern's territory.

Oct. 14—Michigan, 24; Case, 0.
Oct. 20—Michigan, 11; Purdue, 0.
Oct. 27—Michigan, 12; Illinois, 0.
Nov. 3—Michigan, 12; Indiana, 0.
Nov. 10—Michigan, 5; Iowa, 28.

MICHIGAN was slow in rounding into form, but as their men are heavy and in the best of condition, their games were all hard and served to develop the offense more quickly than in the case of the others. The team has played good football, but it was outplayed and outclassed by Iowa, despite its strength, especially at tackle and end, and its kicker as good as any.

Oct. 14—Chicago, 6; Minnesota, 3.
Oct. 20—Brown, 11; Chicago, 6.
Oct. 27—Penn, 41; Chicago, 0.
Nov. 3—Iowa, 17; Chicago, 0.
Nov. 10—Chicago, 0; Northwestern, 5.

Chicago is clearly out of the race and has deteriorated 50 per cent from the form of last year. The material has been good, but for some reason failed to develop as it should. Nor can it be said to Chicago's credit that no men

of questionable standing have been played this year. As usual Chicago is violating the spirit of college sport.

Oct. 14—Wisconsin, 11; Beloit, 0.
Oct. 27—Wisconsin, 45; Grinnell, 0.
Nov. 3—Minnesota, 6; Wisconsin, 5.
Nov. 10—Wisconsin, 54; Notre Dame, 0.

Wisconsin, with nine of last year's eleven, played a winning game so long as it met only second or third class teams, but was well checked by Minnesota. Wisconsin is particularly strong at tackle, despite the tendency of the backs to fumble. Unfortunately, Wisconsin again offends the spirit of college sport by playing Riorden, although perhaps within the letter of the rule Wisconsin none the less violates the spirit.

Nov. 3—Iowa, 17; Chicago, 0.
Nov. 10—Iowa, 28; Michigan, 5.

IOWA has nearly the same team as represented them last year, and consequently it has had only quickness and team play to develop; they are the only eleven in the West using the guards-back style of play. The easy games the eleven had in the early season did not reveal their real strength, but the crushing defeat of Chicago followed by the equally decisive victory over the supposedly invincible Michigan shows that Iowa outranks all the Middle Western teams save that of Minnesota, which has shown equally high-class football. It is too bad they will not meet.

Iowa's backs are very fast, which makes a strong offense.

Northwestern has greatly improved over last year, but is not yet in the same class with the teams representing the other Western universities. They have a great deal of good material which has not yet been taught the most essential point of football, namely, the art of holding the ball when tackled; in consequence the team has lost much by fumbling.

Beloit shows its usually snappy team and disregard for the ethics of college sport. It does not cut very much figure in the football of the West.

Purdue, with the assistance of a very good kicker, has held the majority of the larger teams to very close scores. The record of Robertson, their captain and fullback, of seven goals from the field in one game, will stand for a long while.

The work of all the teams throughout the West, barring perhaps Chicago, has been up to average, and in some cases better. It is pleasing, too, to record a more satisfactory outlook in general ethical conditions.

IT is no easy task each month to choose what is most interesting, from so much that is interesting, in the golfing world.

The notable thing about modern golf is the machine-like way in which the first-class men score. Out of seventy-two holes played on the Chicago Golf Club course at Wheaton in the open championship, only four cost six, and thirty only out of the seventy-two cost five or over. Forty-two holes were played in four or under! The days when the "eye is out," when one is "a little off on the putting-green," when "the iron shots do not come off," are past. There are golfers nowadays who play day after day, and month after month, on a certain level, and a high one at that.

The first ten scores in the open championship competition were all under 335 strokes, though with the exception of Taylor and Bell, no one was within fourteen strokes of the champion, Vardon. When it is remembered that Vardon is an indifferent putter, his scoring in such small figures almost puts his game through the green in a class by itself, and it is notable that Vardon uses very short and very light clubs.

It is true, probably, that the average run of golf links, especially in this country, are better than they were, but this alone would not account for the greatly increased accuracy of play. Certainly the men who play the game have no better eyes, no steadier nerves, no more pluck than their predecessors. The balls are more uniformly better, and the clubs are more carefully made, but these factors alone do not explain it all.

This improvement in average accuracy is probably due more than anything else to the shorter clubs and the shorter backward swing. Mr. Hutchinson himself admits now that he exaggerated somewhat both the value of, and the actual length of, what is known as the St. Andrews' swing. Since the instantaneous photograph has been used to discover the secrets of good golf playing, it is found that the gelatine plate measures that swing as much shorter than did the naked eye. Men seemed to swing further than they actually did, and now it is admitted on all hands that an exaggerated swing is prejudicial to accuracy, and nine times in eleven does not add much distance. Following upon that, of course, came the shorter club, and in addition a lower grip on the shaft.

TEN years ago we were told to sweep the ball away, but now, those who have seen Vardon or Taylor play, recognize the fact that they do not stop to sweep the ball away; they switch

it away. There is a whip-like motion to the club, as though the lower end of it had a steel spring in it. This means powerful wrists, to be sure, but it means also a shorter and a lighter club.

The Baltusrol Tournament for women had ninety-six entries and eighty-eight starters, the largest number for a women's tournament in the history of the game in this country. Miss Hoyt turned in a gross score of ninety-seven, which was not only the best score for the day, but the lowest round on record for a woman player over that course. The first sixteen players turned in cards of one hundred and eleven or under, Miss Oliver coming second to Miss Hoyt, and Miss Griscom third, with cards respectively of one hundred and four and one hundred and five. Miss Griscom, the present champion, won out, beating Miss Hoyt and apparently having something in hand.

THE United States Golf Association have embodied, and very properly, in their rules, the rule in regard to pointing out the line of the putt. This may be done, so the rule reads, by one's own caddie, by the partner's caddie or by the partner himself, but if, in so doing, the person so pointing puts the club used for the purpose on the ground, the player loses the hole. In the case where the player himself goes to the other side of the hole to get a line for his putt, if he puts his putter to the ground, he, too, ought to pay a penalty and lose the hole; so at least the rule is interpreted in Scotland and in England. This is often done here without penalty, the player claiming that the above-mentioned rule does not include the player himself but only mentions the player's partner, the player's caddie and the partner's caddie. Mr. Kerr should make that clear. Of course, if it be wrong for the persons mentioned, it is equally wrong for the player himself, but we have in these days so many metaphysicians who play golf that so far as possible we should allow them no verbal loop-hole for the practice of their favorite pastime of logic-chopping.

IT is said that Mr. W. B. Thomas, of Boston, who is now the President of the United States Golf Association, intends to resign at the end of this year's service. It is to be hoped that Mr. Thomas will reconsider his intention. It is a post of some responsibility, of no emolument and entailing considerable expense, both of time and money. When a man does his duty with as much enthusiasm as Mr. Thomas has shown he should not be allowed to escape.

PRICE COLLIER.

"*The Oregon Trail*," by Francis Parkman. Illustrated by Frederic Remington. Little, Brown & Co., Boston.

WHEN young Francis Parkman kept a journal of what he called "a tour of curiosity and amusement" to the Rocky Mountains in the summer of 1846, he little thought that he was writing history. Still less that he was writing unique history and that his notes by the way would be the most graphic, exact, and often the only contemporary record of the emigrants who gathered at Independence, then the extreme frontier town of Missouri, of the Mexicans who came in from Santa Fe and of the early French hunters from the mountains. Yet but for his day by day notes, little would, from personal observation, be known of the men and methods by which the great pilgrimage to the West was made and Trans-Missouri opened up, or of the then Indian life. He saw the first of the great hosts of transcontinental emigrants on the Oregon Trail. He hunted the buffalo, the antelope and the elk with the uncorrupted Indian, and he lived in the frontier forts when the advance guard of the American army was on its way to the campaign across the plain which added an empire to the States. Truly remarkable and romantic is "*The Oregon Trail*," and if to the graphic illustrations by Frederic Remington had been added a map, and the localities designated by present names, it would indeed have been a book of unmarred pleasure. 'Tis a pity so simple and necessary an adjunct should have been omitted. The names of remote border forts and trading stations conveyed sufficient information to contemporaneous readers, but fifty years has obscured their significance.

"*The Monitor and the Navy under Steam*," by Frank M. Bennett, Lieutenant U. S. Navy. Houghton, Mifflin & Co.

AS promised in the preface, this work is "a history of the origin, career and influence of the United States ironclad steamer *Monitor*. Beginning with the earliest attempts at steam navigation, the author depicts the prolonged opposition from ignorance and prejudice that the introduction of steam into the navy encountered. He traces the history of the *Monitor* from its earliest conception in the mind of Ericsson until its untimely end off Cape Hatteras, and shows how it was the culmination of all that had preceded and the prototype of the modern battleship. In short, he describes it as the connecting link between the old and new navy, sealing the fate of sailing ships and point-

ing the way to the modern steel ironclads. Not the least interesting part of the book is the last chapter, devoted to the Spanish-American war. The author, an officer on the flagship *New York*, was peculiarly favored to get at the truth by personal observation, and, aside from this, has drawn his material entirely from official reports and despatches. It is a relief to read an authentic account of the late naval operations after a deluge of flubdubbery hastily thrown together by incompetent writers. The volume as a whole is a concise history of our navy, written by a naval officer who knows what he writes about.

"*The Sportsman's Handbook*" to practical collecting, preserving and artistic setting up trophies and specimens. By Rowland Ward, F. Z. S. Rowland Ward, Limited, London.

BESIDE telling the sportsman-naturalist how, in the hunting field, to preserve and to care for trophies, together with some valuable hints as to their subsequent mounting, this handbook gives definite and dependable information concerning the chief big game hunting fields of the world. The illustrations and diagrams are especially helpful features of this practical volume—the most satisfying of its kind published.

"*Memories of Vacation Days*," by Frank Presbrey. Redfield Brothers, New York.

THESE excerpts from the author's many previously published books of travel are useful selected memoranda of home and foreign shores tending to re-awaken happy memories and to carry the reader beyond the daily grind of the work-a-day life. They are judiciously varied in locality and subject and printed with elegance and taste, although in a practical form, compact enough for the wayfarer's pocket.

OTHER books received are:

"*Golf Dont's*," being admonitions that will help the novice to play well and scratch men to play better. By H. L. Fitz Patrick. Doubleday, Page & Co.

"*Animal Life*." A first book of zoölogy, illustrated. By David Starr Jordan, Ph.D., LL.D., President of the Leland Stanford, Jr., University, and Vernon L. Kellogg, M.S., Professor in the university. D. Appleton & Co.

"*The Jumping Kangaroo and the Apple-Butter Cat*," by John W. Harrington. Illustrated by J. W. Condé. A book of comic animal stories originally written by the author for the entertainment of his daughter. The illustrations will be enjoyed by children of a larger growth. McClure, Phillips & Co.



ENTIRELY dominated by the technical in every detail of genuine progress the automobile does not present its true face to the public, and never will until a new one shall have grown up prepared to treat automobile technique as a matter-of-fact portion of its education. Lying so close to everyday life automobilism may hereafter compel the public to study its principles, but it is perhaps more probable that in general its patrons will be content to learn the operation of automobiles without understanding their mechanism any more intimately than they now understand the mechanism of a sewing machine or the anatomy of a horse.

The past month has been rich in disclosures of scientific and constructive progress, mainly in evidence at the two exhibitions held in New York, but to the casual observer the progress was substantiated mostly through the highly finished appearance of the exhibits, which bore testimony that the makers considered the experimental stage as passed and the business era opened. Strong financial names on the letterheads of companies whose backing had previously been an uncertain quantity, point in the same direction.

THE performances of the vehicles within the exhibition buildings were followed by the public with evident astonishment at the absence of noise and odor in some of the gasoline motor vehicles; and the trembling of these vehicles which was formerly so disagreeably prominent was very much reduced.

It should be a matter for patriotic congratulation that it was in five strictly American constructions that this shortcoming had been most victoriously overcome; in three of the cases by means of a very high grade of workmanship and a painstaking balancing of the engines, and in two cases by adding a throttling system permitting the operation of the carriages at slow speeds with very small explosions. The throttling systems used in these two cases were radically different in principle but produced

about equal results, promising much for the gasoline carriage of the future.

THE French importations of this type were decidedly bolder in outlines than the home products, and the public seemed to appreciate them more and more on closer acquaintance. One large American firm builds in the same style: large, clean-cut new outlines resembling nothing that horses ever drew; and the public liked them, too.

The steam carriages, monotonously uniform in style—surreys and phaetons, phaetons and surreys, with one omnibus and here and there a prosaic delivery wagon—all highly efficient, noiseless and agreeable to ride in, were the objects of deeply interested inquiry. The makers are preparing to manufacture them in rapidly increasing quantities, but their average price and their average weight are much higher than last year.

Familiarity with electric carriages, upon the streets, seemed to have cooled the public's fervor for them as an object of exhibition, but several unusually small and very convenient electric runabouts with as much space for carrying purposes as required, and weighing little more than 500 pounds, won admiration.

THESE shows were considered highly successful by the exhibitors, affording them an excellent opportunity for comparing notes; and most of them received the impression that it would be desirable to commence active manufacture at once. A strong impetus in this direction was received, and the effect of it must soon be felt in the market. Another effect will be the discouragement of amateur automobile building; the hopelessness of which becomes very conspicuous.

The shows were an epitome of all that has been going on in the automobile world, and overshadow in importance the fast journeys between New York, Newport and Boston which several owners of imported gasoline vehicles made during October, with minor mishaps due to wretched roads.

Our public refuses to take those vehicles and road-racing exploits seriously, in which it requires a twelve to twenty horse-power motor and two to four thousand pounds of material for the transportation of two persons with little or no baggage. While highly interesting to a *chauffeur emballé*, whose vision of automobilism is one of fancy, they do not seem to point the way to those useful results which the American business man likes to keep within his visual angle, even though he depart on an errand of fashion or caprice.



"THUNDERING THROUGH THE NARROW STREETS OF A COUNTRY VILLAGE."

[*"The Automobile in French Recreative Life,"* p. 376.

O U T I N G

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THE MOONLIGHT TRAILS

By Charles G. D. Roberts

THERE was no wind; and the young fir-trees stood up straight and tall and stiffly pointed from the noiseless white levels of the snow. The blue-white moon of midwinter, sharply glittering like an icicle, hung high in a heaven clear as tempered steel.

The young fir-trees were a second growth, on lands once well cleared, but afterwards reclaimed by the forest. They rose in serried phalanxes, with here and there a solitary sentinel of spruce, and here and there a little huddling group of yellow birches. The snow-spaces between formed sparkling alleys, and long, mysterious vistas, expanding frequently into amphitheatres of breathless stillness and flooding radiance. There was no trace of that most ghostly and elusive winter haze which represents the fine breathing of the forest. Rather the air seemed like diamonds held in solution, fluent as by miracle, and not without strange peril to be jarred by sound or motion.

Yet presently the exaggerated tension of the stillness was broken, and no disaster followed. Two small, white, furry shapes came leaping, one behind the other, down one of the corridors of radiance, as lightly as if a wind were lifting and drifting them. It was as if some of

the gentler spirits of the winter and the wild had seized the magic hour for an incarnation. Leaping at gay leisure, their little bodies would lengthen out to a span of nearly three feet, then round themselves together so that the soft pads of their hinder paws would touch the snow within a couple of inches of the prints from which their fore paws were even then starting to rise. The trail thus drawn down the white aisle consisted of an orderly succession of close triplicate bunches of footprints, like no other trail of the wild folk. From time to time the two harmonious shapes would halt, sit up on their hindquarters, erect their long, attentive ears, glance about warily with their bulging eyes which, in this position, could see behind as well as in front of their narrow heads, wrinkle those cleft nostrils which were cunning to differentiate every scent upon the sharp air, and then browse hastily but with a cheerful relish at the spicy shoots of the young yellow birch. Feeding, however, was plainly not their chief purpose; and always within a few moments they would resume their leaping progress through the white glitter and the hard, black shadows.

Very soon their path led them out into a wide glade, fenced all about with the

serried and formal ranks of the young firs. It seemed as if the blue-white moon stared down into this space with a glassiness of brilliance even more deluding and magical than elsewhere. The snow here was crossed by a tangle of the fine triplicate tracks. Doubling upon themselves in all directions and with obvious irresponsibility, they were evidently the trails of play rather than of business or of flight. Their pattern was the pattern of mirth; and some half dozen wild white rabbits were gayly weaving at it when the two newcomers joined them. Long ears twinkling, round eyes softly shining, they leaped lightly hither and thither, pausing every now and then to touch each other with their sensitive noses, or to pound on the snow with their strong hind legs in mock challenge. It seemed to be the play of care-free children, almost a kind of confused dance, a spontaneous expression of the joy of life. Nevertheless, for all the mirth of it, there was never a moment when two or more of the company were not to be seen sitting erect, with watchful ears and eyes, close in the shadow of the young fir-trees. For the night that was so favorable to the wild rabbits was favorable also to the fox, the wild-cat and the weasel. And death stalks joy forever among the kindred of the wild.

From time to time one or another of the leaping players would take himself off through the fir-trees, while others continued to arrive along the moonlight trails. This went on till the moon had swung perhaps an hour's distance on her shining course; then, suddenly it stopped; and just for a fleeting fraction of a breath all the players were motionless, with ears one way. From one or another of the watchers there had come some signal, swift, but to the rabbits instantly clear. No onlooker not of the cleft-nose, long-ear clan could have told in what the signal consisted, or what was its full significance. But whatever it was, in a moment the players were all gone, vanishing to the east and west and south, all at once, as if blown off by a mighty breath. Only towards the north side of the open there went not one.

Nevertheless, the moon, peering down with sharp scrutiny into the unshadowed

northern fringes of the open, failed to spy out any lurking shape of fox, wild-cat or weasel. Whatever the form in which fate had approached, it chose not to unmask its menace. Thereafter, for an hour or more, the sparkling glade with its woven devices was empty. Then, throughout the rest of the night, an occasional rabbit would go bounding across it hastily, on affairs intent, and paying no heed to its significant hieroglyphs. And once, just before moon-set, came a large red fox and sniffed about the tangled trails with an interest not untinted with scorn.

II.

The young firwood covered a tract of poor land some miles in width, between the outskirts of the ancient forest and a small settlement known as Far Bazziley. In the best house of Far Bazziley—that of the parish clergyman—there lived a boy whom chance, and the capricious destiny of the wild folk, led to take a sudden lively interest in the moonlight trails. Belonging to a different class from the other children of the settlement, he was kept from the district school and tutored at home, with more or less regularity, by his father. His lesson hours, as a rule, fell when the other boys were busy at their chores—and it was the tradition of Far Bazziley that boys were born to work, not play. Thus it happened that the boy had little of the companionship of his fellows.

Being of too eager and adventurous a spirit to spend much of his leisure in reading, he was thrown upon his own resources, and often found himself hungry for new interests. Animals he loved, and of all cruelty towards them he was fiercely intolerant. Great or small, it hurt him to see them hurt; and he was not slow to resent and resist that kind of discomfort.

On more than one occasion he had thrashed other boys of the settlement for torturing, with boyish playfulness and ingenuity, superfluous kittens which thrifty housewives had confided to them to drown. These rough interferences with custom did him no harm, for the boys were forced to respect his prowess,

and they knew well enough that kittens had some kind of claim upon civilization. But when it came to his overbearing championship of snakes, that was another matter, and he made himself unpopular. It was rank tyranny, and disgustingly unnatural, if they could not crush a snake's back with stones and then lay it out in the sun to die gradually, without the risk of getting a black eye and bloodied nose for it.

It was in vain the boy explained, on the incontrovertible authority of his father, that the brilliant garter snake, the dainty little green snake, and indeed all the snakes of the neighborhood without exception, were as harmless as ladybugs. A snake was a snake; and in the eyes of Far Bazziley to kill one, with such additions of painfulness in the process as could be devised on the moment, was to obey biblical injunction. The boy, not unnaturally, was thrust more and more into the lonely eminence of his isolation.

But one unfailing resource he had always with him, and that was the hired man. His mother might be, as she usually was, too absorbed in household cares to give adequate heed to his searching interrogations. His father might spend huge blanks of his time in interminable drives to outlying parts of his parish. But the hired man was always at hand. It was not always the same hired man. But whether his name were Bill or Tom, Henry or Mart or Chris, the boy found that he could safely look for some uniformity of characteristics, and that he could depend upon each in turn for some teaching that seemed to him more practical and timely than equations or the conjugation of *Nolo, Nolle, Nolui*.

At this particular time of the frequenting of the moonlight trails, the boy was unusually fortunate in his hired man. The latter was a boyish, enthusiastic fellow, by the name of Andy, who had an interest in the kind of things which the boy held important. One morning as he was helping Andy with the barn work, the man said:

"It's about full moon now, and right handy weather for rabbit snarin'. What say if we git off to the woods this after-

noon, if your father 'll let us, an' set some snares fer to-night, afore a new snow comes and spiles the tracks?"

The silent and mysterious winter woods, the shining spaces of the snow marked here and there with strange footprints leading to unknown lairs, the clear glooms, the awe and the sense of unseen presences—these were what came thronging into the boy's mind at Andy's suggestion. All the wonderful possibilities of it! The wild spirit of adventure, the hunting zest of elemental man, stirred in his veins at the idea. Had he seen a rabbit being hurt he would have rushed with indignant pity to the rescue. But the idea of rabbit-snaring, as presented by Andy's exciting words, fired a side of his imagination so remote from pity as to have no communication with it whatever along the nerves of sympathy or association. He was a vigorous and normal boy, and the jewel of consistency (which is usually paste) was therefore of as little consequence to him as to the most enlightened of his elders. He threw himself with fervor into Andy's scheme, plied him with exhaustive questions as to the methods of making and setting snares, and spent the rest of the morning, under direction, in whittling with his pocket knife the required uprights and cross-pieces, and twisting the deadly nooses of fine copper wire. In the prime of the afternoon the two, on their snowshoes, set off gayly for the wood of the young fir-trees.

Up the long slope of the snowy pasture lots, where the drifted hillocks sparkled crisply, and the black stumps here and there broke through in suggestive, fantastic shapes, and the gray rampikes towered bleakly to the upper air, the two climbed with brisk steps, the dry cold a tonic to nerve and vein. As they entered the fir woods a fine, balsamy tang breathed up to greet them, and the boy's nostrils took eager note of it.

The first tracks to meet their eyes were the delicate footprints of the red squirrel, ending abruptly at the foot of a tree somewhat larger than its fellows. Then the boy's sharp eyes marked a trail very slender and precise—small, clear dots one after the other; and he had a feeling of protective tenderness to the maker of

that innocent little trail, till Andy told him that he of the dainty footprints was the bloodthirsty and indomitable weasel, the scourge of all the lesser forest kin.

The weasel's trail led them presently to another track, consisting of those triplicate clusters of prints, dropped lightly and far apart; and Andy said "Rabbits! and the weasel's after them!" The words made a swift picture in the boy's imagination; and he never forgot the trail of the wild rabbit or the trail of the weasel.

Crossing these tracks, they soon came to one more beaten, along which it was plain that many rabbits had fared. This they followed, one going on either side of it that it might not be obliterated by the broad trail of their snowshoes; and in a little time it led them out upon the sheltered glade whereon the merry-makers of the night before had held their revels.

In the unclouded downpour of the sunlight the tracks stood forth with emphasized distinctness, a melting, vaporous violet against the gold-white of the snowy surface; and to the boy's eyes, though not to the man's, was revealed a formal and intricate pattern in the tangled markings. To Andy it was incomprehensible; but he saw at once that in the ways leading to the open it would be well to plant the snares. The boy, on the other hand, had a keener insight, and exclaimed at once, "What fun they must have been having!" But his sympathy was asleep. Nothing, at that moment, could wake it up so far as to make him realize the part he was about to play toward those childlike revellers of the moonlight trails.

Skirting the glade, and stepping carefully over the trails, they proceeded to set their snares at the openings of three of the main alleys; and for a little while the strokes of their hatchets rang out frostily on the still air as they chopped down fragrant armfuls of the young fir branches.

Each of the three snares was set in this fashion: First they stuck the fir branches into the snow to form a thick green fence on both sides of the trail, with a passage only wide enough for one

rabbit at a time to pass through. On each side of this passage-way they drove securely a slender stake, notched on the inner face. Over the opening they bent down a springy sapling, securing its top, by a strong cord, to a small wooden cross-piece which was caught and held in the notches of the two uprights. From the under side of this cross-piece was suspended the easy-running noose of copper wire just ample enough for a rabbit's head, with the ears lying back, to enter readily.

By the time the snares were set it was near sundown, and the young fir-trees were casting long, pointed, purple shadows. With the drawing on of evening the boy felt stirrings of a wild, predatory instinct. His skin tingled with a still excitement which he did not understand, and he went with a fierce yet furtive wariness, peering into the shadows as if for prey. As he and Andy emerged from the woods, and strode silently down the desolate slopes of the pasture lots, he could think of nothing but his return on the morrow to see what prizes had fallen to his snares. His tenderness of heart, his enlightened sympathy with the four-footed kindred, much of his civilization, in fact, had vanished for the moment, burnt out in the flame of an instinct handed down to him from his primeval ancestors.

III.

That night the moon rose over the young fir-woods blue-white and glittering as on the night before. The air was of the same biting stillness and vitreous transparency. The magic of it stirred up the same merry madness in the veins of the wild rabbits, and set them to aimless gambolling instead of their usual cautious browsing in the thickets of yellow birch. One by one and two by two the white shapes came drifting down the shadowed alleys and moonlight trails of the fir-wood towards the bright glade which they seemed to have adopted, for the time, as their playground. The lanes and ways were many that gave entrance to the glade; and presently some half dozen rabbits came bounding, from different directions, across the radiant

open. But on the instant they stopped and sat straight up on their haunches, ears erect, struck with consternation.

There at the mouth of one of the alleys a white form jerked high into the air. It hung, silently struggling, whirling round and round, and at the same time swaying up and down with the bending of the sapling-top from which it swung. The startled spectators had no comprehension of the sight, no signal-code to express the kind of peril it portended and how to flee from it. They sat gazing in terror. Then, at the next entrance, there shot up into the brilliant air another like horror; and at the next, in the same breath, another. The three hung kicking in a hideous silence.

The spell was broken. The spectators, trembling under the imminence of a doom which they could not understand, vanished with long bounds by the opposite side of the glade. All was still again under the blue-white, wizard scrutiny of the moon but those three kicking shapes. And these, too, in a few minutes hung motionless as the fir-trees and the snow. As the glassy cold took hold upon them they slowly stiffened.

About an hour later a big red fox came trotting into the glade. The hanging shapes caught his eye at once. He knew all about snares, being an old fox, for years at odds with the settlement of Far Bazziley. Casting a sharp glance about, he trotted over to the nearest snare and sniffed up desirously towards the white rabbit dangling above him. It was beyond his reach, and one unavailing spring convinced him of the fact. The second hung equally remote. But with the third he was more fortunate. The sapling was slender, and drooped its burden closer to the snow. With an easy leap the fox seized the dangling body, dragged it down, gnawed off its head to release the noose, and bore away the spoils in triumph, conscious of having scored against his human rivals in the hunt.

Late in the morning, when the sun

was pale in a sky that threatened snow-fall, the boy and Andy came, thrilling with anticipation, to see what the snares had captured. At the sight of the first victim, the stiff, furry body hanging in the air from the bowed top of the sapling, the boy's nerves tingled with a novel and fierce sense of triumph. His heart leapt, his eyes flamed, and he sprang forwards, with a little cry, as a young beast might in sighting its first quarry. His companion, long used to the hunter's enthusiasms, was less excited. He went to the next snare, removed the victim, reset the catch and noose; while the boy, slinging his trophy over his shoulder with the air of a veteran (as he had seen it done in pictures), hastened on to the third to see why it had failed him. To his untrained eye the trampled snow, the torn head, and the blood spots told the story in part; and as he looked a sense of the tragedy of it began to stir achingly at the roots of his heart. "A fox," remarked Andy, in a matter-of-fact voice, coming up at the moment, with his prize hanging rigidly, by the pathetically babyish hind legs, from the grasp of his mittened fist.

The boy felt a spasm of indignation against the fox. Then, turning his gaze upon Andy's capture, he was struck by the cruel marks of the noose under its jaws and behind its ears. He saw, for the first time, the half-open mouth, the small, jutting tongue, the expression of the dead eyes; and his face changed. He removed his own trophy from his shoulder, and stared at it for some moments. Then two big tears rolled over his ruddy cheeks. With an angry exclamation he flung the dead rabbit down on the snow and ran to break up the snares.

"We won't snare any more rabbits, Andy," he cried, averting his face, and starting homewards with a dogged set to his shoulders. Andy, picking up the rejected spoils with a grin that was half bewilderment, half indulgent comprehension, philosophically followed the penitent.

THE AUTOMOBILE IN FRENCH RECREATIVE LIFE

By Guy Wetmore Carryl

UNDOUBTEDLY it is a somewhat remarkable thing to find the French the acknowledged leaders in any one branch of sport, but in automobilism, as things are at present, at least, they unquestionably bear away the palm. To be sure, the sport is as yet so new, so much more a matter of possibilities than of actualities, that the most audacious of prophets would hesitate to venture a prediction upon what the next ten years are destined to add to our knowledge of it, or to say what country is to find an entirely satisfactory solution, what people will be at the end of the decade the acknowledged masters of the motor. But the French, if they were not the pioneers, are at least to-day the vanguard of the growing army of automobilists, and hardly a month passes without their making a forward stride in the perfecting of the road motor.

Nothing related to sport has ever taken such hold upon France, or wrought so great a change in her recreative life. From Brest to Nice, from Calais to Biarritz, the country is given over to automobilism heart and soul, and every day the hum of the motor grows louder in the land, and the horseless carriages increase in number. From the Automobile Club de France, the great headquarters of automobilism on the Place de la Concorde in Paris, out to the smallest roadside hotel in the most insignificant country town this new craze has stretched its tentacles like some gigantic octopus, and drawn into its service all sorts and conditions of men.

To one watching the passing stream of mechanical carriages on one of the great Parisian avenues or in the streets of some popular country resort it would seem that there were as many different types of French automobiles as there are Frenchmen to drive them, but among these countless varieties there are com-

paratively few which fulfill all requirements in anything approaching a satisfactory manner.

It is possible and convenient to divide all French automobiles into five great classes: 1, Automobiles proper—that is to say, the large touring carriages of from twelve to twenty-four horse power, with accommodations for six, eight, or even twelve persons; 2, Motor cabs, in general size and appearance very similar to the ordinary brougham; 3, Voitures, corresponding approximately to phaetons, and carrying two, three, or four passengers; 4, Motor tricycles with or without an extra seat in front or a little car drawn behind; and, 5, Racing machines, of tremendous size, power, and speed, but carrying but one or two passengers at the utmost.

The range of size and excellence may be judged from the fact that there are motor tricycles for fifteen hundred francs and racing machines which have sold for sixty thousand. Confined as is our subject, however, to the influence of the automobile on French recreative life, we may at once exclude from notice the motor cabs, which are used for ordinary traffic in the large cities, and the racing machines, which are so distinct in character as to be worthy of separate consideration. For recreative life has to a large extent to do with the country, and it is in the country that the influence of the automobile in France is most apparent.

For one unfamiliar with the conditions in France to-day as contrasted with those of five years ago it is almost impossible to realize the change that the growth of automobilism has wrought. There is a word which to the well-to-do French sportsman means more than sport, more than comfort, more than anything, and that is "chic." Totally untranslatable, it is nevertheless akin to the English "smart," and it is as much as possible the scepter with which the

French god of fashion rules his subjects. So it is that automobilism has come to be the ruling passion of the French out-of-door class, not solely because it is enjoyable, for often it is not, or because it is healthy, for often it is quite the contrary, but because it is "chic."

It is a characteristic of certain varieties of sport that they are peculiarly annoying and obnoxious to all save their devotees. The perversity of human in-

cept those who are riding in it and those whose duty it is to take charge of it and keep it in repair. It may be a thing of beauty, which is decidedly exceptional, it may be rapid and commodious and convenient, but to the Philistine it can not fail to be a trial and an abomination. It threatens to crush him at every venture he makes from the safe refuge of the sidewalk, it offends his senses with its bulky proportions, its rank fumes, and its irrepressible clamor, it frightens



"MEN AND GIRLS GO BOBBING THROUGH SMALL VILLAGES."

telligence resents a widespread interest in anything for which, for one reason or another, its own enthusiasm is not aroused. This has always been true of golf, and it is particularly true of automobilism, for until the millennium ushers in a noiseless, dustless, and odorless motor, it is improbable that an automobile will ever be anything but an affliction to every one in its vicinity, ex-

cept those who are riding in it and those whose duty it is to take charge of it and keep it in repair. It may be a thing of beauty, which is decidedly exceptional, it may be rapid and commodious and convenient, but to the Philistine it can not fail to be a trial and an abomination. It threatens to crush him at every venture he makes from the safe refuge of the sidewalk, it offends his senses with its bulky proportions, its rank fumes, and its irrepressible clamor, it frightens

his horses, and it distracts his nerves, and so he condemns it, hypercritically, perhaps, but none the less emphatically. So much for the darker side. To its credit, it is undeniable that, in France at least, automobilism has proved more of a blessing than otherwise. It has built up not only the main industry of construction, but the attendant and dependent industries of care,

supply, and repair, which have acted as an impetus in every town, large and small, from end to end of the land. It has called into being a vast multitude of mechanics and caretakers, who are, for the most part, of that laboring class for which, in a continental country, it is most difficult to find employment, boys and young men—that is to say, of from fifteen to twenty-five. And finally, to approach our subject more nearly, it has doubled the distance which it is possible to cover in a day's outing, and by this impetus to the innate love of the French for the open air, has taught them more about their country in one year than they could otherwise have learned in ten.

In accounting for the remarkable growth of automobilism in France the essential fact must be borne in mind that this is a country where the road conditions are absolutely ideal. These broad macadam highways, survivals of Roman civilization, run from the main centers out to all corners of the land, perfectly level for ten or fifteen miles at a stretch, and as firm and smooth as asphalt. Mud is practically an unknown quantity, inequalities are things which

are suppressed by law. It is small wonder that where there exists perfection of road construction and preservation automobilism has advanced by giant strides.

But automobilism is too recent an innovation to be viewed by the French peasant with anything but a distrustful eye. In Paris people no longer turn to watch a motor vehicle go by. It has come to be a commonplace. But in the country it is still much of a mystery, and its arrival is the signal for the assembling of a curious group of interested spectators. In Paris familiarity has bred a species of contempt, and the automobile has lost enough of its dignity to be known by nicknames. It is an "auto" or a "teuf-teuf." In the country it is still something akin to a noisy latter-day god, which is solemnly yecept a "machine," or, more elaborately, *une voiture automobile*; or sometimes, insultingly, a *saleté*, which may be euphoniously translated as "nuisance."

The great racing machines or touring carriages, thundering through the narrow streets of a country village, set the ready tongues of the inhabitants going like so many shuttles, and to discussing



"THEN IT IS THAT THE DESPISED HORSE IS CALLED INTO SERVICE."



"THE HUM OF THE MOTOR GROWS LOUD IN THE LAND."

their various merits or demerits with an eloquence that is picturesque if not particularly well informed.

It is in and about the fashionable summer and winter resorts and watering places that the influence of the automobile upon French recreative life is most marked. In summer the high tide of automobilism surges about Trouville, Dieppe, Dinard, and Etretat; in winter, about Nice, Cannes, and Monte Carlo, while at all seasons of the year there is a constant succession of motor vehicles dashing through the popular resorts in the immediate vicinity of Paris, such as

Versailles, Fontainebleau, St. Cloud, and St. Germain.

At Trouville in particular, at the height of the season in mid-August, this sport dominates all other amusements, and it is no exaggeration to say that fully half the conveyances passing of an afternoon through the main streets of the town are automobiles. At the Deauville race-track a special portion of the carriage enclosure is reserved for mechanical vehicles, and here, while the races are in progress, they may be seen in a long line, including perhaps two score distinct varieties.

One can not drive for a mile along any of the magnificent roads of Normandy or Brittany without meeting an automobile flying along, twenty miles an hour, or drawn up at some convenient spot, the owner and his guests busily employed in unpacking luncheon baskets and snapping cameras. More than this, the automobile has penetrated into the most out-of-the-way corners of France, and it is indeed an unenterprising roadside hostelry that does not boast accommodations therefor, or include in its *personnel* a mechanician capable of assisting the automobilist in making necessary repairs.

But the very fact that the owner of an automobile is able to go faster and farther than the bicyclist, driver, or equestrian brings in its wake a series of misadventures peculiar to the pursuit, and on some secluded by-road one will now and again come upon the shattered wreck of a motor carriage, betrayed by defective steering gear into too intimate an acquaintance with the solidity of a high bank or a stone wall. Or, again, it will be that some little rivet or crank has gone astray, and the stately carriage, none the less helpless for being to all appearance sound, will be hopelessly stalled, ten miles from a hotel or repair shop, sometimes just as night is coming on or a gigantic thunder-storm is looming overhead. Then it is that the despised horse is called into service to drag the disabled motor to its destination, and among all the trivial amusements which enliven the prosaic existence of the French peasant there is none more heartily appreciated than the sight of a pair of sturdy farm-horses towing a disabled automobile. It is an enforced surrender of assumed superiority which appeals with peculiar eloquence to that in-born sense of irony for which the Frenchman, high or low, is justly celebrated.

And again, because France is not a new and growing country, there is an amusing incongruity in the constant meeting of the new and the old, as when some giant racing machine, glaringly modern with its crimson paint and brass trimmings, and with its occupants clad in the latest style of leather road cos-

tume, thunders down to the Seine and is carried across on the most primitive possible ferry, a broad, shallow barge, painfully poled from bank to bank by two slow-witted countrymen, to resume its headlong course upon the other side. It is a meeting of extremes in good earnest.

Undeniably there is an absorbing fascination in the novelty of this headlong means of transport, and so the French, in whose estimation novelty covers a multitude of defects, are logically in the van of the movement. But it is to be hoped that the attention of a people famous for good taste will ere long be directed to the beautifying of what is now in almost all its features most unpicturesque. The French automobilist in what may be called his war-paint is a thing of singular and surpassing unloveliness. In winter he is covered, head, body, and hands, with furs of a sickly chrome, and of such abnormal thickness that their wearer is full twice the normal size of man. In summer his raiment is of leather, on which the accumulated dust lies like a gray pall. And at all seasons of the year he wears goggles so monstrous as to give him the appearance of a deep-sea diver.

The "chauffeur," or automobile groom, is a being *sui generis*. He is commonly about seventeen years of age, and wears a bottle-green livery, with a visor cap and leather leggings; and his affection for his machine is that of an engine driver for his locomotive. On the average French automobile when he does not occupy a kind of rumble, he sits at the driver's feet, his own planted on the step, and when his employer is at luncheon he will proudly exhibit the mechanism to curious bystanders, but will often refuse to allow one to photograph the carriage. "It is a question of guarding the patents," he says—which is sufficiently amusing to compensate for the loss of the picture.

And so were it not for the celebrated fickleness of the French it might be thought that in their recreative life the horse is doomed. It would seem as if his impending extinction, so long a stock jest with the alleged comic papers, were in the way of becoming stern reality. But let the horse take heart. Far in

the lead as are the French to-day in all branches of automobilism, the whole system is built upon the sand of popular fancy, not upon the rock of enterprise, and in the day when fashion ceases to smile upon the motor vehicle the incentive will be removed and French automobiles will fall behind in the race. But if the Americans and English can preach many a profitable lesson to their

French cousins, the latter can mount the pulpit with at least one text which we should do well to turn to account: that of government highways, maintained from year's beginning to year's end in a condition of absolute indefectibility. Without these all the mechanical genius in the world will never accomplish a satisfactory solution of the motor problem or make it permanent.



"THE COUNTRY ROADS OF FRANCE ARE IDEAL."

RIFLES FOR BIG GAME

By Horace Kephart

THE choice of a rifle for target shooting is comparatively a simple matter, because the requirements are few and simple. But with a hunting arm it is different. As soon as one takes a rifle into the field to hunt he learns that he can not carry a heavy gun on an all-day tramp without excessive fatigue. He finds that game will not always stand still to be shot at, that the canny wild things are expert in hiding, that it is one thing to shoot on a dead level and another to shoot into tall trees or down a steep hill, that his bullet has a curved flight and allowance must be made for distance, that it is impossible to aim truly with target sights into dark thickets or towards the sun, and in many other ways he finds how different field shooting is from such target practice as is conducted on our ranges. He learns, too, that there are specialties even in big game shooting, and that the best rifle for one class of hunting may not be best for another.

Suppose you have jumped a deer at close quarters in thick woods or underbrush. The deer is bounding. Trees are in the way. In a few seconds the animal may be out of sight. You must pick out an opening, and shoot quickly, or not at all. There is no scattering charge of shot in your gun—only a single bullet. But the animal is large and within stone's throw. A bullet striking anywhere within six inches of a certain spot back of the shoulder will bag your game. You shoot with a gunner's aim, leveling the rifle as you would point your finger, and shooting with somewhat the same instinct that you would discharge an arrow or throw a baseball. In this case you want a light rifle that "comes up" like a shotgun, with coarse sights that can be caught quickly. It should strike a knock-down blow. There should be a shot or two in reserve that can be delivered in a second. Accuracy, as marksmen understand that term, is of minor consequence. Any rifle will hit such a mark if well held. Not coarse sights, nor

heavy recoil, nor hard trigger-pull handicap the shooter in such work, for he may wobble some, and flinch a little, but still hit a deer at fifty paces.

But now suppose another case. You are stalking on a mountain side fairly clear of underbrush, or on a plain where cover is scarce, or along the shore of a lake or river—anywhere, in short, where your vision is unobstructed. Probably when the animal is seen it is a long way off. You approach it until there is no longer any cover, or until the beast shows signs of uneasiness. The distance is still considerable—so great, indeed, that a wobble of one-twentieth of an inch of the rifle's muzzle at the instant of discharge will score a clean miss. The success of a hard day's stalk, perhaps of an expensive and long-planned expedition, may hang upon this one shot. If you do not align the sights deliberately and accurately upon the mark, if you do not press off the trigger with the utmost nicety at precisely the right instant, you will go back to camp empty-handed and sore at heart. Here is where marksman's aim comes into play. Here is where the skill of the nail-driver counts. Your rifle must not only be accurate in itself when tested from rest; it must be so built, sighted, and triggered that you can shoot it accurately offhand—which is another matter. For deliberate shooting at standing or slowly moving objects a fairly heavy rifle with "crowbar balance," rather fine sights, light trigger-pull, shooting very accurately, with flat trajectory and great smashing power, is the ideal arm.

Gunning in a jungle is one thing; stalking in the open is another. Snapshooting and nail-driving with the rifle are different arts. Now here is the rub. A sportsman going after American big game is likely to get into both of the above-mentioned situations on the same trip. He cannot carry what our British friends call a "battery," for he hunts in a canoe, or on a pony, or depends upon his own legs. There is no attendant to

hand him the right gun at a critical moment. Consequently, American sportsmen are not so solicitous about the best rifle for this or that specialty as they are about the best all-round rifle. Is it possible to procure a weapon that can be shot with great accuracy in the field and at targets, but can be handled deftly in snap-shooting, and will smash bone or tissue as effectively as a .45 express? Can this same rifle be used with lighter charges that will not mangle small game, and will shoot accurately with such trajectory that you need make no allowance in sighting when you shift from the full-power load to the light one?

Ten years ago this discussion might have been as brief as the famous chapter on the snakes of Ireland. There was no all-round rifle. But times have changed. The advance of chemical and mechanical science has given us a new type of weapon, the small-bore, high-power military rifle, using smokeless powder and jacketed bullets. There are many varieties of this type, but all are characterized by high velocity, flat trajectory, great penetration, accuracy up to 1100 or 1200 yards, absence of smoke, lightness of ammunition, and light recoil. These are advantages so important from a military standpoint that all nations have adopted the new arms. Hunters of big game were naturally interested in this change of armament. They appreciated the good points of the small-bores. They have always been inclined to favor weapons taking government ammunition, because it can be bought at frontier posts where none other may be procurable.

But it was feared that such small-caliber bullets would not be effective on large or dangerous game. The service cartridge of the .30 U. S. A. rifle will pierce a half-inch plate of boiler-iron or a three-foot elm-tree; but penetration alone does not suffice in hunting. Although a shot through brain or spine will cause almost instant death regardless of the size of the bullet, yet one can not always count on hitting a vital spot. If the game is running, or partially hidden, or the light is bad, or the wind high, or the distance uncertain, we must take some chances. What is needed is a smashing, knock-out blow, that will

make the beast wilt, even though struck in ham or paunch. Now the service .30 bullet has a so-called "explosive" effect at moderate range when striking an organ distended by fluid; but through flesh or empty viscera it merely drills a small, round hole, which immediately contracts and lets out scarcely any blood, while the bullet, piercing with ease, expends most of its momentum upon trees or rocks in the distance. Such a wound imparts no more shock than a carter's whip, and it soon heals.

The same trouble had been experienced, though in less degree, with ordinary large-caliber bullets, and a way had been found to overcome it. By casting the point of a bullet hollow, the missile will expand on impact, making a hole in flesh much larger than the bullet's normal diameter. A similar expedient was at once tried with the small-bore military bullets, and is still used to some extent abroad. But when a bullet is lightened, and its center of gravity shifted in this manner, its accuracy is not so good, the wind affects it more, and its trajectory is altered, obliging one to shift his sights according as he is using solid or hollow bullets. These objections are removed, and better penetration, with sufficient expansion obtained by using a solid soft-point bullet—that is to say, one on which the steel mantle covers only the base and bearing-surface of the projectile, leaving naked lead exposed at its point. The high velocity imparted by nitro powder suffices to upset or mushroom such a soft point when it strikes, and the long, solid core ensures penetration.

Experience has proven that soft-point bullets of .30 caliber, when driven at a muzzle-velocity of 2000 feet a second, are powerful enough for any game found on this continent—provided the bullets are relatively long and heavy, their mantels are thick and hard, and enough lead is exposed at the point. These provisos will bear study. For example, a standard soft-point bullet for the .30 U. S. A. cartridge, weighs 220 grains, and its rather thick mantle of cupro-nickel-steel has a long bearing on the core. On the contrary, a .30-30 soft-point bullet, though of nearly the same diameter, is shorter,

weighs only 170 grains, and its jacket of tinned copper is thin and soft. Now, if both these projectiles issue from the muzzle with the same speed, that of the .30-30 will of course have less momentum, and will fly to pieces more readily on impact, while, at ranges beyond 200 yards, it will lose speed more quickly, and consequently will have a higher trajectory and shorter range. It follows that close attention should be given to weight of bullet and thickness of mantel, in selecting a cartridge to be used on game larger than deer.

Hasty inferences should not be drawn from the curious fact that soft-point bullets penetrate as deeply into steel plate as full-manteled ones do, though making larger holes. It is astonishing but true that the 117 grain soft-point bullet from a .25-35 will pierce as far in steel plate as the full-manteled bullet from a .30 U. S. A. (at very short range). But in wood or other material of mild resistance soft-points do not pierce a third as far as full-manteled bullets. The penetration of a soft-point .30 U. S. A. in white pine is the same as that of a 300 grain solid lead bullet from a .45-90 black powder cartridge; but in harder material it is greater; and the smashing effect of the .30 is greater in any case.

Personally, I consider that the .30-30 cartridge, or even the .25-35, is powerful enough for such game as Virginia deer. Many successful hunters use them on elk or moose. But for all-round work I prefer the .30 U. S. A. cartridge. Here are some of the things you can do with it, if you are a marksman:

1. You can outclass a Springfield in long-range sharpshooting, or in any sharpshooting at unknown distances.

2. With soft-point bullets of proper make you can smash bone or tissue as effectively as with a .45 or .50 caliber express.

3. Procure a lot of full-manteled .30-30-160 Winchester bullets. Their actual diameter is .305 inch, whereas that of the .30 U. S. A. is .308. Get a good mechanic to make you a swage with which to upset these light bullets to .308 caliber. You can swage several hundred of them in an evening. Take a batch of new shells (those which have once been

fired with standard charge are brittle) and load them with 15 grains weight of smokeless powder, with above bullets, using no wad, but leaving the powder loose in shell. Use $7\frac{1}{2}$ U. M. C. or $2\frac{1}{2}$ W. primers. This reduced load shoots steadily into a 6-inch circle at 200 yards. You can shoot through a grouse lengthwise without spoiling an ounce of meat. The shells can be reloaded many times, at a cost of about one dollar a hundred. The rifle cannot lead, even though it be a little rusty. There is no difference in "line" or drift between this reduced charge and the regular full-power cartridge up to 200 yards. Now sight your rifle to strike center of a 6-inch bull's-eye at 125 yards with standard charge, when aiming with bead just touching bottom of bull's-eye. You will find that, with the gun so sighted, both the full-power and the reduced charges will shoot into the same hole up to 50 yards. By holding "dead on" (aiming at center of bull's-eye instead of at the lower edge) the reduced charge will strike center at 100 yards, and the full-power cartridge is good for 200 yards. In other words, no matter which cartridge you are using your rifle is correctly sighted for any game, from squirrels to moose, and you are always ready for anything that may turn up.

4. By using a bullet weighing 125 grains, and a few grains of a low-pressure smokeless powder you can practice in the basement of a city house, shooting as accurately as with a .22 and your next-door neighbor will not be disturbed. Hundreds of shots may be fired without cleaning, and there will be no trace of lead in the rifle barrel. The same bullet, with 8 to 15 grains of powder, shoots accurately up to 100 yards.

I give these details because I know that nearly every owner of a high-power rifle seeks a light load for small game and target practice, and that few succeed in getting satisfactory results. Lead bullets of ordinary pattern are unsuitable for such guns, and black powder cannot be used. The short-range cartridges for the .30 U. S. A. that are supplied by ammunition makers are worthless. They are inaccurate, they lead the gun, and their trajectory is too high for practical hunting.

For snap-shooting, a rifle should be fairly light. Every one who, by toting a 10 or 12 pound gun on an all-day tramp, has worn out first his arms, then his shoulders, and finally has jumped a deer when the gun was astraddle the back of his neck, knows all about this. But a rifle may be too light. Many of the new crop of high-power repeaters have this fault. Their makers, following military precedent (usually bad), have turned out very light rifles by taking weight out of the barrel. As the violent pressure of smokeless powder is chiefly expended in the chamber of the gun and a few inches forward, the rest of the barrel need not be thick, so far as safety is concerned. Consequently a rifle barrel is now shaped somewhat like a cannon, with thick breech and long, thin barrel. Now here comes trouble; for this makes a sort of tuning-fork of the barrel, causing it to vibrate excessively on explosion. The result is that many of these rifles are inaccurate, and all of them are liable to flip. "Flip" means that when the rifle is shot with a heavy charge its barrel first buckles up in the middle, then flips contrariwise, and finally (after the bullet has sped) settles again to a straight line. The direction of this flip can only be learned by testing. It depends upon length of barrel, tension of the metal, character of breech mechanism, and bend of stock. Flip may be fairly constant in a given rifle, so that the gun shoots accurately with a given charge when its sights are adjusted to allow for flip. But if a light charge is then used, there will be no flip, and the rifle shoots true to its normal line of fire. Consequently only one kind of ammunition can be used in that gun. I have seen a rifle that was correctly sighted for the standard high-pressure load shoot 6 inches to the right at 50 yards with a reduced charge. Yet this same reduced charge showed no difference in drift from the full-power cartridge at 200 yards when shot from a thick, stiff barrel.

A 6½ or 7 pound rifle for the .30 U. S. A. cartridge is a monstrosity. It is probably inaccurate, it is sure to flip, and—it needs a mule behind it to kick back when it goes off. Undoubtedly one does

not feel recoil in the field as he does in target practice; but it is by target practice that you get acquainted with your gun. How can you adjust your sights correctly, save by firing many series of shots from muzzle-and-elbow rest? If you flinch then, what do you learn? No city man can become a good field shot unless he first works faithfully at targets, and learns to hit them. He can not hit them if he flinches.

There is another objection to a rifle barrel that tapers rapidly from breech to muzzle. It must have an abnormally high front sight, that sticks up like a sore thumb, and makes you very prone to overshoot in quick firing.

My own opinion is that a .30-40 rifle for all-round shooting should weigh not less than 8 pounds, nor over 9, and that as much as practicable of this weight should be in the barrel, where a gun's shooting qualities lie. This would also improve the balance of the arm, for a rifle should not balance immediately in front of the trigger-guard, but at a point 3 or 4 inches in front of it. This is partly to aid steady holding, and partly for convenience in carrying. The latter point is especially noticed in rifles with protruding box-magazines, which, as now made, are a nuisance to carry, because they balance just where you cannot grip them.

The all-round rifle should have a thin shotgun butt, because the prongs of a crescent butt interfere with quick shooting. It should also have a sling, especially for mountaineering, where both hands should be free, and for long tramps to and from the hunting ground.

The conventional patterns of American rifles are radically defective in two things of vital consequence in accurate marksmanship. These are sights and trigger-pull. The first thing an experienced rifleman does with a new rifle is to knock off the factory sights, replace them with others more practical, and smoothen or lighten the trigger-pull. Nobody can shoot straight with a plain nickle front sight and buckhorn rear save under selected conditions. Try it on a bright day, by shooting successively towards the four points of the compass. Then try it in dark woods, or over the snow, or

towards dawn or twilight. The front sight should have an ivory bead. The rear sight should be a large aperture with thin rim, either on the receiver or tang, and adjustable for elevation. A buckhorn, or plain bar, on the barrel is sure to blur, and it cuts off half of the object aimed at and all the ground in its neighborhood.

Triggers should be made so that they will not creep, but will pull off sharply and positively. There should be a set-screw on the hammer, or other means of adjusting the trigger-pull to suit individual preferences.

Finally, the breech mechanism of a rifle should be tight, to exclude sand and snow; and it should be so simple and get-at-able that a hunter can dismount and reassemble it with no tool but an extemporized screw-driver. If ever you get hung up 90 miles from a blacksmith's shop you will appreciate this. The feed and extraction should be powerful and true. A jammed magazine or a stuck

shell bring anathema upon sun, moon, stars, and all your ancestors.

On looking back over this article, I find it consists only of a few desultory remarks on a subject that deserves volumes. Some of my views may be unpopular. Well, riflemen are of many minds as to arms and ammunition. But on one thing they all agree. The rifle is a noble weapon. It brings us pleasures that no scatter-gunner can ever know. A shotgun takes you into cultivated fields, or into those narrow wastes within sight and sound of civilization. But the rifle entices its bearer far into primeval forests, into mountains and deserts untenanted by man. To him in whom the primitive virtues of courage, energy, and love of adventure have not been sapped there is scarce a joy comparable to that of roaming at will through wild regions, viewing the glories of the unspoiled earth, and feeling the inexpressible thrill of manliness sore tested by privation and hazard, but armed and undismayed.

UNANSWERED

By Arthur Macdonald Dole

A SYCAMORE beckoned as I hastened by to-day,
A bay-tree called me softly, murm'ring gently in its play,
But with a fitful shiver ceased; for I went on my way.

A live-oak then half challenged, with a signal whispered low,
And waved imploringly for me to linger, yea, I trow
It even caught my careless hand; yet withal would I go.

A jaunty flower nestling midst the fragrant wayside sage,
Gave gladsome nod in greeting, vainly striving to engage
My thoughts so hopelessly intent on scenes of worldly stage.

A singing bird winged near me to a bush with happy song
The lilted notes swelled daringly in sweet cadential throng,
Still did I give no welcome as I quickly sped along.

Ah! lost the moment, lost the hour, and lost this day one bond
That links man's sordid selfishness with purer things beyond,
For Nature called me to her soul and I did not respond.



"THE RACE." BY CECIL ALDIN.

ABOUT SPORTING PRINTS

H. Ingalls Kimball

ONE Jacques Christoph Le Blond, who was born in Frankfort in 1670, and who probably never heard of such an altogether senseless pastime as riding to hounds, shares with your sturdy British gentleman of a century ago whatever there is of credit in the sporting print; for Le Blond invented the printing of etched plates in color, and the country gentleman, whose love of horseflesh outweighed his love of art, insisted that his prints should depict him and his friends in pink coats and white breeches, with a background of rolling country and a pack of hounds in the fore. It is unfortunate that his taste in the matter of art should have been less delicate than as to port and madeira, and that he should have been satisfied with pretty bad drawing, and sometimes even with the crudest of color. If we held to the term, we should have to include under the general subject of Sporting Prints many which treated neither of the hunt nor the turf, the moors or the king's highway; for in the early part of the century the word "sport" was broad in its scope and embraced many

scenes in town as well as country. Unfortunately most of these prints have been destroyed, for they fell into the hands of the old gentleman's wife and daughters at his death. In any event, though they were rare and valuable they could hardly be publicly reproduced nowadays.

It is unfortunate, too, that most of the sporting prints were made either by hacks, who did them solely for the price they fetched, or by amateurs whose knowledge of sport far exceeded their technical artistic ability. To this rule, however, there are one or two notable and happy exceptions, for Thomas Rowlandson, one of the greatest caricaturists of his own or any time, did some splendid sporting plates, which had in them plenty of snap and "go," and much of his genial humor. Rowlandson himself lived a pretty gay life, and the sporting subjects he drew were done at the suggestion—often after the sketches—of his rich friends from the country.

It is quite remarkable that more artists should not have followed a branch of art which must have been profitable, and

must also have had a certain charm. As a matter of fact, almost any print which has been sufficiently good to survive the hundred years since it was made will bear the name of one of a little coterie of men who could be counted on the fingers of your two hands.

The publishers of them were even less numerous. Mrs. Humphrey, with her little print shop, which was often frequented by the notables of the day who bought caricatures of themselves with the best of humor in the world; Mr. Ru-

the position of the whip on the York and London Highflier, and graduated from this high seat to the position of artist and publisher, who painted the winners of the Saint Leger for thirty-three years.

Samuel Howitt seems to have done nothing of any moment except sporting prints, and most of them have a good deal of spirit and are pretty well colored. He was a brother-in-law to Rowlandson, and, like Herring, was absolutely without technical training.

Then there was Robert Pollard, whose



"BREAKING COVER." BY SAMUEL HOWITT.

dolph Ackermann, with his "Repository of Art and Fashion," and the Messrs. Fores, of the City, being about all there were, although many prints bear the name of John Frederick Herring, who seems to have been his own publisher exclusively, for no print from his establishment is signed by any other artist, although there are so many different styles that they must have been done by a number of men. Herring, by the way, like most of the other publishers of sporting prints, had almost no artistic education, having begun life as a coach painter, after which he was promoted to

early training was that of a silversmith (so, you remember, was Hogarth's), who made a good many prints of distinctively sporting subjects, especially coaching. Most of them were after his own design and all were more than ordinarily good. Like his *confrères*, however, he seems to have gone to the bad, for he died poor in 1838. His son James also did some good coaching pieces.

Another man who had almost no training—having devoted his early years to mastering the profession of a tallow chandler—was John Scott, who engraved some of the best plates of the whole

period. He was a pupil of Pollard's, by the way, but most of his plates were after designs by other men. There is a fine series of Horses and Dogs, which was published in 1831 in "The Sportsman's Repository; a Correct Delineation of the Horse and Dog," written by Scott, and with his own and his brother's plates. The horses were painted by J. N. Sartorius, Jr., and Benjamin Marshall. The dogs were done by Philip Reinagle, who was a pupil of Allan Ramsay, court painter of George

1733, and, although he did not die until 1807, it is probable that plates after some of his pictures must have been made before 1780. If this is so they would be among the earliest if not the earliest of the distinctly sporting prints.

You will find the name of H. W. Bunbury on many a good print; but always as *inv.*, rarely *del.* and never *sculp.* He was a son of Sir William Bunbury, of Mildenhall, Suffolk, and was a great lover of sport and sporting men, of art



"OPPOSITION COACHES." BY JAMES POLLARD.

Third and Queen Charlotte. There is a more or less amusing tale to the effect that once when Ramsay was going to the Continent for a jaunt he left an order for Reinagle to paint "fifty pairs of kings and queens at ten guineas each." Reinagle filled the commission and then resigned and took up painting dogs, which he continued with great success, changing sometimes to other animals, until he died in 1812.

Another man for whom Scott made a number of plates was Sawray Gilpin, who was notable only because he was born in

and of artists. It is probable that he is responsible for many more prints than those which bear his name. He was always gadding about the print shops and coffee houses with Howitt and Rowlandson, Gilray, Cruikshank, and the rest, and even Sir Joshua was very fond of him. Sometimes he made sketches from which his friends made plates, and still oftener suggested subjects for caricatures or humorous bits. It's a pity we don't know more about him. It's a pity, indeed, that we know so little about most of the men who made sporting prints,



"THE START." BY JOHN FREDERICK HERRING.

and it only goes to show that their value as real artists, even in their own time, could not have been great.

By no means all of the prints were originally issued as such, very many of them having gone to the embellishment or illustration of the many books on sporting subjects which have always been so popular. Some of these books had over a hundred plates by the best known men of the time, all carefully etched and aquatinted and printed in colors; but in most of the books the prints appeared simply in outline, and many of them have in the last few years been taken from the binding, colored by hand and sold as tinted impressions.

Probably the best known of all the makers of the sporting prints—chiefly because he made such a vast number of them—was Henry Alken, whose plates are so numerous that no complete list of them has ever been prepared. Beginning about 1815 or 1820, and going steadily and sturdily forwards without interruption through the period of "Birthday Gems," "Gift Books," steel engravings and lithographs (which process came to England about 1830), Alken continued

to make etched plates of the chase and to have them printed in color. Along about 1849 he seems to have been in the employ of Messrs. S. & T. Fuller, who conducted an art establishment in London much similar to Ackermann's "Repository," but they also seem to have undertaken the instruction of the young in the various arts, and among the books which they published was one by Alken himself on the art of etching, in which his views on the subject are expressed as follows: "Unlike a pencil or water-color drawing, unlike a painting in oils, or a work in marble, which can only gratify those who at one time examine it, the impressions from an etching may be multiplied by thousands to grace the portfolios, the albums and the scrap books of near and distant relatives and friends, and to awaken reminiscences of the etcher and giver when otherwise they would not arise." Speaking of his own ability as a teacher, and justifying himself in the writing of the manual, he goes on: "Forty years' practice in the various methods of engraving, with some natural mechanical genius, may be considered as some qualification for this task. Nor

will my endeavors prove less successful from the fact that during a great portion of that time I have been in the habit of giving lessons in the library, parlor and drawing-room by which I must, naturally, have acquired a method of mitigating and, where practical, of altogether avoiding the unpleasant processes of the art." Some one said, "Oh, that mine enemy might write a book!" then Alken went and did it, for if any man would criticise Alken's standpoint in his work he has but to quote the words of Alken himself. But he could draw!

From 1830 to 1860—the black walnut age—or thereabouts, there was a flood of sporting prints, but few of them were good. In the first place, the introduction of lithography in England—which vastly cheapened reproduction—made the sale of etchings difficult, especially those which were printed in color. Then, too, the public taste seems to have degenerated in many ways; and, while there were undoubtedly many great painters and etchers during the middle of this century, they appealed but little to the class who had made sporting prints possible. Of course George Cruikshank and John Leech and other great men of dis-

tinctly popular reputation were working all this time; but their drawings were usually cut on wood and printed in "Punch," or as illustrations to books.

The last few years, which have brought to the world some appreciation of the eighteenth and early nineteenth centuries in furniture, in printing, and in architecture, have quite naturally brought forth men who are doing work which, while modeled on eighteenth century lines, bears at the same time the imprint of the twentieth. Among these men Cecil Aldin, John Hassall, and B. H. Smale, of London, are far and away the most notable as regards sporting prints. They work in strong, bold outline and sturdy colors, and it is a pity that their plates should be almost entirely lithographic; but, though they lack the delicacy of the old etchings, and although almost any color which has undergone the mellowing influence of years is better than the crude pigment as it is first applied, the work of these three men is still distinctly good, and the print sellers of London have made small fortunes in disposing of it at "a guinea the sheet."

So much for the best of the men who designed and etched sporting prints.



"AN ELECTION." BY WILLIAM HOGARTH.

And now a word about the mechanical process by which they were produced. A plate engraved in 1785 by Rowlandson, entitled "Copper-plate Printers at



A MODERN SKETCH. BY FOSTER.

Work," is vastly interesting, as showing how his own plates were printed. It is probably drawn from the room in which the prints from the caricaturist's etchings were pulled, an apartment evidently near the sky. A couple of stalwart printers are hard at work rubbing ink of various colors into the copper plates. A sturdy workman is turning the press, while a little oddity of a printer is drawing an impression from the copper lately under pressure.

It may be well to say that the method of producing an etching is as follows: A piece of smooth copper is covered with a thin layer of beeswax or other material which is not attacked by acid. On this surface is scratched the drawing; then the surface of the plate is covered with acid, which eats away the metal where the lines have been scratched. In being printed, the plate is entirely covered with ink, and then all the ink is wiped off of the surface, so that only that which remains in the sunken lines is impressed upon the paper.

In color printing from an etched plate

the surface of all the solid colors is slightly roughened and the color is put on little by little in the various portions of the plate, according to the required shade, after which the plate is wiped and printed as usual. This is the process which was invented by Le Blond, and by which many of the most beautiful impressions from fine engravings have been produced.

In the cheaper grades of work the color is more roughly put on, and all the small touches are made in water color on the finished print, and this touching up of the impressions sometimes makes it difficult to tell a plate which was printed in color from one which was colored entirely by hand.

The method pursued by Rowlandson, and probably pretty closely followed by his colleagues, was as follows: A neat and carefully finished drawing was first prepared, and Rowlandson etched the outline sharply and clearly on the copper plate; an impression from the "bitten-in" outline was printed on drawing-paper, and the artist put in his shadows, modeling the forms and sketchy distance with India ink, in the most delicate handling possible; the shadows were then copied in aquatint on the outline plate, sometimes by the designer, but in most cases by an engraver who practised this particular branch, which a few experts were able to manipulate with considerable dexterity and nicety. Rowlandson next completed the coloring of his own India-ink-shaded impression in delicate tints, harmoniously selected, his sense of color being of a refined order as regarded the disposal of tender shades agreeable to the eye. His aptitude in this respect is quite as remarkable as his ease of delineation; and if his outlines can be copied with any approach to deceiving the eye of a connoisseur, an attempt to imitate his color, simply as it remained in its characteristics, is tolerably certain to betray the fraud.

The tinted impression, which was intentionally finished with greater delicacy and elaboration than the artist generally displayed, served as a copy for imitation, which was handed to Mr. Ackermann's trained staff of colorists, the publisher finding constant employment

for a number of clever persons whom he had educated expressly for this skilled employment. These artists had worked under his auspices and personal supervision for years, until, by constant practice and the pains which were taken by the publisher to improve their abilities, they attained a degree of perfection and neatness never arrived at before, and almost beyond belief in the present day, when the system has fallen into comparative disuse. The assistants did their best to reproduce the effect of the original drawings, and the number of impressions required to satisfy the public must have kept them constantly at work, and occasionally jeopardized their high finish. There is an amazing contrast between the

"price, one shilling, colored," after a school of vulgarity to which the panorama of the Lord Mayor's Show at one penny, with its four yards of florid tenuity, is quite a refined work of art.

Rowlandson himself, by the way, used to sometimes counterfeit his own work in a curious fashion, which was doubtless practised by other artists as well, though such spurious self-imitations are not of frequent occurrence. It is said that he would saunter from his neighboring lodgings in the Adelphi, round to the Repository of Arts, and, as the title of Mr. Ackermann's establishment was no misnomer, every possible appliance was there found ready to hand. The artist would order a saucer of vermilion



"THE MEET." BY HENRY ALKEN.

plates issued from Ackermann's Repository, worked out like elaborate water-color drawings, in subdued, well-balanced tints, with the utmost lightness and skill of touch, and the lurid, chromatic daubs which pass current to the present day as Rowlandson's caricatures, and which were issued from Cheapside,

and another of India ink, ready ground, with reed pens and several sheets of drawing-paper; he would then combine his inks in the proportions he thought proper—in the flesh lines vermilion predominated, in draperies India ink; shadows were a mixture of the two, and distant objects were faintly rendered in

the India ink alone. The outline was filled in on this principle, but, as the designer's own manual and dexterous rapidity had ceased to satisfy him, he had ingeniously discovered an expeditious method of multiplication sufficient for his purpose, without resorting to the sister art of engraving. The drawing was made on the principle essential in any engraving which has to give impressions—that is, the subject was reversed, right being changed to left—the only extra care required; the outline was somewhat stronger and the pen more fully charged than was the usual practice, and when the design was completed it formed the *cliché* from which, before the ink became fixed, by means of a press, and paper dampened to the proper consistency, it was easy to print off duplicates as long as the ink held out. The three or four copies obtained by this manifold contrivance were corrected and strengthened, according to their requirements; a series of these impressions were then shaded with India ink, so as to lend the figures contour and solidity, and express a lighter distance; and then came the final tinting, in delicate washes of color, and the completed works were ready for introduction to the public as original drawings.

Rudolph Ackermann, who published most of Rowlandson's plates, was proprietor of the "Repository of Art and Fashion" mentioned above—and a favorite lounge of the dilettante it was. Rowlandson's fertility was so great that Ackermann found it hard to keep pace with his productions, and if the story of

his novel method of multiplying his drawings is serious, it will strike the reader that Mr. Ackermann had reason to feel anxious on his *protégé's* account. Indeed, so hard did it become to keep the demand up to the supply that Mr. Ackermann began the publication of "The Repository of Arts and the Magazine of Poetry" (named after his own establishment), which was issued monthly with plates by Rowlandson in every number.

So much has been said of Rowlandson, not because he is best known as a maker of sporting prints—indeed, he made but few—but he is probably the only man who had any considerable claims to real greatness who ever made any at all. Moreover, he lived and flourished at the very heyday of the period, and his life and manner of working were really very similar to those of his colleagues.

Many of the old plates are still in existence, though badly worn, and care should be taken to avoid the modern impressions from these plates, as well as the numerous lithographic copies and colored counterfeits; and, moreover, in several instances work was done by two or three men of the same name, as, for instance, Henry Alken and his son, Robert Pollard and his son, James F. Sartorius and his son (although in this case the son's work was the better).

On the whole, sporting prints are valued largely by their condition and original beauty, as well as by the charm and delicacy of their coloring, and one is pretty safe in paying a fair price for any print or set of prints which pleases his eye, quite disregarding the signature.



"TO THE RACES." BY THOMAS ROWLANDSON.

PORTUGUESE EAST AFRICA AS A HUNTING FIELD

By Howard C. Hillegas

IN the Pungwe River district of the Portuguese territory on the east coast of Africa fifty varieties of animals, ranging in size from elephants to jackals, roam over the country in troops of hundreds. It is one vast game



THE AFRICAN HUNTER'S MOST CÔVETED
TROPHY.

park, in which the report of a sportsman's rifle is seldom heard.

Nowhere in the world is there anything comparable with this territory and its wild animals. Hunters who have been in the game districts of Southern Asia, Australia, and the Western Hemisphere say that those fields are of insignificant value beside those of the east coast.

The Pungwe River district is specially favorable on account of its proximity to the seaport of Beira, where lines of American and European steamers make regular and frequent calls. There is no necessity of making a long journey from the seacoast to this game territory; it is only a few miles from where the passenger leaves the steamer. By going in the regular mail steamers by way of Southampton and Cape Town it is possible to

reach Beira in six weeks at an expense of about \$300 from New York; but there are several lines of freight steamers, with excellent passenger accommodations, which ply between New York and east coast ports and make the journey in about five weeks. The fares on these lines are less than half that of the mail boats.

When South Africa was discovered the country swarmed with game. Even a hundred years after Cape Town was founded the land was filled with elephants and lions, and the settlers suffered as much from the attacks of these as from the wiles of the native tribes. Twenty varieties of antelope roamed over the plains, and great herds of quagga and gnu often devastated the farms on the outskirts of Cape Town. The wanton destruction carried on by the early settlers, who were satisfied with horns and skins, practically annihilated the game in that region, and caused the remnants of the herds to escape northwards into the east coast district, where natural advantages and the absence of hunters have combined in assisting in their propagation.

The coast territory between the Limpopo and Zambesi Rivers has vast numbers of game in every part, but the district bordering on the Pungwe, which is midway between the two, is the feeding ground of the largest herds of animals on the continent. To make general statements concerning this wonderful region is to invite incredulity, but it is almost impossible to exaggerate in speaking of it. One specific instance was sufficient to convert the writer to the belief that he who attempts to exaggerate concerning the game in this region must be extraordinarily adept in the art.

In the autumn of 1897, at the invitation of several Beira merchants, a small party of voyagers journeyed twenty miles into the interior "to see their zoo,"



AN EAST AFRICAN CAMP.

as one of the hosts expressed it. From the limbs of trees situated on an eminence the party saw, through field-glasses, more than sixty different herds of game within a radius of ten miles. Attempts to count the number of animals in even one herd were futile, owing to their size and constant movement. A hunter of twenty-five years' African experience estimated that there were ten thousand head of game in sight. Among the herds were twenty-two elephant, several hundred buffalo and innumerable zebra, antelope, giraffe and eland.

This great feeding ground, which is mentioned by Speke, Grant, Livingstone and Stanley, begins within a few miles of the coast and extends several hundred miles into the interior. It is easily reached by railroad, on horseback, or by sailing up the river, which abounds in hippopotamus and crocodile. The country for the greater part is open and free from the rank undergrowth so frequent in tropical countries. The streams are heavily wooded, and towards the source of the Pungwe there are deep forests in which elephant are plentiful and rhinoceros numerous. Fever and lions are the only dangers to which the hunter is exposed, but both can be readily avoided by taking proper precautions.

Notwithstanding the fact that almost every South African claims to have slain a lion at one time or another, those beasts continue to exist in large numbers in the Pungwe region, as well as farther inland. Even in the settled districts near Salisbury lions constantly appear to terrorize the inhabitants, and the frontiersmen are constantly armed on account of them.

Lions are more plentiful, however, farther in the interior, especially north and west of Salisbury, a territory which is readily reached by the railway. The natives kill hundreds of them by scattering poisoned meat in the districts where they abound, and the white settlers are making systematic efforts to exterminate them by setting gun-traps. Notwithstanding these efforts to rid the country of lions the sportsman will have ample opportunity for excellent sport for many years to come.

The Pungwe district has not suffered to any great extent from the ivory-hunters, and consequently great herds of elephant still roam over the country. Only several months ago a playful herd interrupted communication between Beira and the north by tearing up the railway tracks and breaking down the telegraph poles. The Portuguese Government pro-

fects the elephant, to a certain extent, by compelling hunters to secure a special license for shooting this game.

Although the hunter may be satisfied with lions and elephant, it is the buffalo and the various kinds of antelope that furnish the greater part of the sport available in this district. Hundreds of these animals inhabit this region, and the country is sufficiently wild to prevent game slaughter, but not too thickly wooded to allow easy pursuit and a long range of vision. The territory practically is an immense zoological garden, in which every specimen of African fauna may be found in inconceivable numbers. Within fifty miles of Beira may be found, in addition to those already mentioned, giraffe, zebra, eland, haartebeest, blaubok, koodoo, gemsbok, vaalrhebok, klikspringer, wildebeeste, hyena, wolf, wild-dog, jackal, and a score of different varieties of antelope and deer.

For the sportsman who loves bird-shooting there are almost as many varieties of fowl as of animals of higher grade. The speedy ostrich is as plentiful in the Portuguese country as farther north in German East Africa, where hunters make great fortunes by catching the wild birds in corrals by means of extensive drives, in which hundreds of

natives take part. Along the Pungwe there are wild ducks, geese, turkey, and bustard in great variety and number.

Unless an extensive stay is meditated, the hunter in the Pungwe district need make no expensive preparations. All the necessary camping paraphernalia can be secured in Beira, but when it is purposed to remain for several months it is advisable not to make purchases in this town, which has reached the point of civilization where taking advantage of a stranger is thoroughly understood.

The best season for shooting game in this region begins in April and ends in October, but there are just as many opportunities for sport in the other months, which constitute the wet season, or the African summer. In the dry season the game deserts the deep interior and finds better grazing near the coast, where there is little or no woodland. Sportsmen prefer the dry season for many reasons, chief among which is the one that they desire to avoid the possibility of contracting the deadly coast fever, which translates healthy men into corpses in less than ten hours. There is little danger of falling a victim to the disease between April and October, but it is advisable to use quinine freely when traveling in the district.



Photo by Reginald Shepherd.

A FEAST IN PROSPECT FOR THE NATIVE HUNTERS.

A QUAKER ARCADY

COUNTRY LIFE ABOUT PHILADELPHIA

HORACE sings of a man who, pining for Arcady, renounced money-lending and betook himself to his farm. At the end of a month he was again in Rome, letting out his money, as before! Rome lacked the rapid-transit facilities which most American cities have. That is where the American with pastoral instincts has the advantage. He may live in the country, if he chooses, yet he is ever within reach of his office downtown. When the claims of duty have been fulfilled at the office he goes to his farm, and if the bleating of sheep and the lowing kine become monotonous he can go back and listen to the ticker. Such is the life of the members of the Philadelphia Farmer's Club.

Once a year each member must give a farmer's dinner, and as the membership limit is twelve, this makes a dinner every month. "Farm dinners" they are supposed to be, but the old-time chicken, with dumplings, pumpkin pie, and cider, have been supplemented with foods and drinks of which our farmer forebears and our contemporaries of the professional farmer class would not know the name.

Yet these men are farmers, amateurs, whose farming is to their regular occupations as sport is to that of their neighbors. They prefer farmhouses to shooting lodges, and instead of tramping a field golfing, or racing automobiles or yachts, they strive to outdo one another in the milk-giving capacity of their cows.

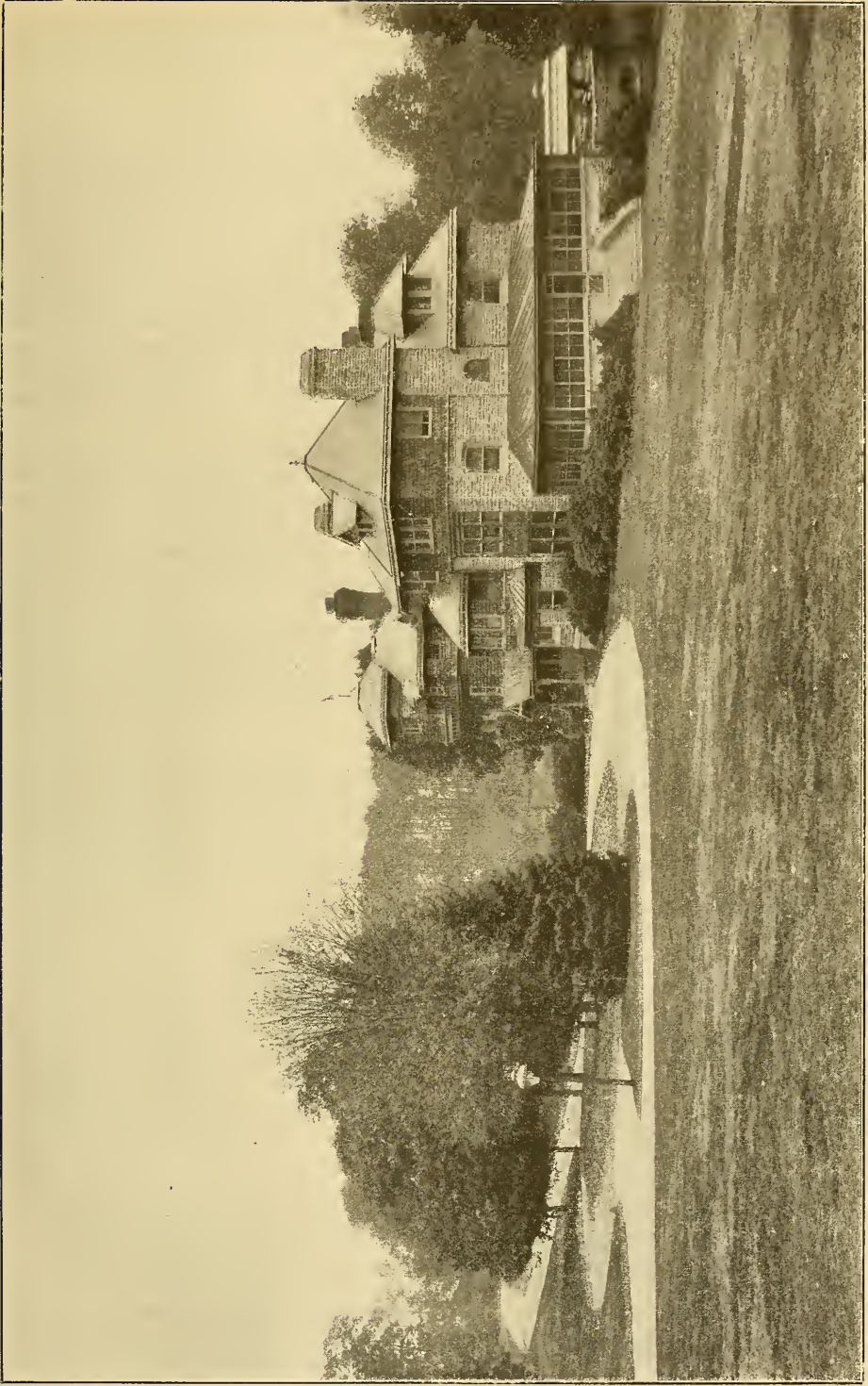
The gentleman farmer is a fixture about Philadelphia. His farm may cost him more than the income which it yields, but while he is devising new schemes for the improvement of his cattle he is resting that portion of his brain which deals with stocks and bonds. This is one of the chief charms of his farming.

So the members of the Philadelphia Farmer's Club vie with one another in the raising of cattle and horses; now and then the prize gardener or dairyman of Number One, in some mysterious way,

finds himself installed, at an advanced salary, on the farm of Number Two. Yet Farmer Number One never gets angry over it; which goes to prove that Voltaire or somebody else was right when he said the only golden age was that which William Penn created in the colony of Pennsylvania.

But let not the mention of William Penn lead any reader to suppose the chief farming about Philadelphia is that of the old régime. Such farming there is, for, to the credit of the Quakers be it said, many of the old, old grants of land are owned to-day by gentlemen farmers who trace their ancestry directly back to the clearers of that land. Fine places they are, with old buildings, old fireplaces, old books with ancient dates and faded names in them; inhabited by men and women on whose every feature is painted "thoroughbred." But these are not the farms of the Farmer's Club.

The latter suggest not so much colonial tradition as nineteenth century enterprise. For the farmers of the club are not content to have their cattle fed on pre-Revolutionary foods nor their butter made by ancient methods. There is too much competition. For instance, when farmer A. J. Cassatt, who while in town is addressed as President Cassatt, of the Pennsylvania Railroad, began to take prizes for cattle, horses, and butter at the State and inter-State fairs, the other farmers looked about for means by which to check what might lead to insufferable pride on the part of the winner. They found that farmer Cassatt had gone into farming on much the same principle which President Cassatt applies to railroading. He owned some twelve hundred acres near Berwyn, and on this had every facility for up-to-date agriculture. Here were not only magnificent barns—big enough to astonish the rich man of the parable—and springs and broad pasture lands, but the latest improvements in the dairy and the most scientific of "feeds;" also skilled dairymen and trained farmers with fancy salaries. It



Taken specially for OUTING by Gilbert & Bacon, Philadelphia.

"DOLOBRAN." THE GRISCOM HOME AT HAVERFORD.

was all fine farming of the latest type, with no pretense nor unnecessary "spread." There is not even a pretentious mansion here, for Mr. Cassatt prefers to keep his country residence at Haverford, within walking distance of classic Bryn Mawr, and so maintains only a small house on his farm. Here he can escape entirely from city life, which would not be the case if farm and country residence were together. So Mr. Cassatt's Haverford home is a sort of half-way place, a paradise between earth and heaven. From Haverford he may drive to and from the farm at Berwyn.

Discovering these things, the farmers of the Philadelphia Farmer's Club swore innocent farmer oaths that if only modern methods are required they would teach Mr. Cassatt that prize-winning at State fairs is a many-sided game. The result has been some farming that would make the average professional agriculturist green-eyed.

It may or may not have been the friendly rivalry of his club fellows that led Mr. Clement A. Griscom to enter upon the making of a farm which, taken in connection with Dolobran, the Griscom home at Haverford, makes an ideal American country place.

Dolobran lies about one mile from Haverford station. It consists of something like one hundred and seventy acres, mainly hilly woodland. Gray's Lane, a narrow little winding road, bordered by vine-covered stone fences, old-fashioned hedges, and stuccoed farmhouses, leads twice or thrice across a winding, splashing brook; uphill and down, then up again to the stone entrance of Dolobran.

There are three houses on the place, chief of which is the stone mansion of the owner. It is a strangely beautiful building of dark, glistening mica-schist, dug from the quarries just hidden in the trees at its rear. Additions have been made from time to time, and now the mansion suggests nothing so much as a row of gabled houses set side by side and cemented together.

The owner of Dolobran knows how easily an amateur may spoil the appearance of a bit of woodland, and has taken no risks. On the contrary, the best land-

scape architects have been consulted, and a graduate of the Massachusetts Agricultural College is installed to care for the forest. His instructions are to encourage to the utmost every bit of primitive wildness. This has been the scheme of Dolobran's forestry and landscape gardening. The paths leading from the house into the woods are not walks, but paths. The forest has not been cleared of underbrush, but on the other hand bushes and briars have been encouraged and in some cases planted. Hence the paths are often bordered by shrubs and thorns, and the wanderer may easily forget that he is not in the forest's very heart.

On the opposite side from Gray's Lane is another approach to Dolobran. Between the two, over hill and through valley, beneath chestnut, oak, and hickory, winds a primitive footpath. This leads through the two ancient quarries whose bare rocks were not beautiful to the eye of the forest lover. But the owner consulted with his botanist; rhododendrons were planted, and now the rocks are hidden between broad evergreen leaves.

Back of the mansion a love of antiquity reveals itself in an old-fashioned English garden. It is circular in shape, and brick-walled, with gravel paths and quaint little green bordered flower beds. Near this is the greenhouse, with its beds and jars of roses, carnations, and palms.

The owner of Dolobran is not content with the mere joy of reveling in pretty woodland. To him a forest is more than a mere aggregation of trees. It is something analyzable, something for study. Hence a botanist has been engaged for weeks, looking into every nook and corner of the place and making a record of its plant life. This record, now nearly completed, shows over fifteen hundred different species.

This feature of Mr. Griscom's country life cannot be too highly commended nor too widely copied. Aside from the scientific value of the records produced, this nature study may develop into a wonderful source of pleasure and recreation. A forest as a forest is inspiring, and full of new life and vigor; but the minute study of its component parts will breed

a love of wild things difficult to surpass. The doubter need but talk with a student of plants or a student of birds to be convinced.

A few of the Dolobran acres have been cleared and made into a garden, where small fruit and vegetables are raised. Here are fancy varieties of strawberries and blackberries, and here are tomatoes and lettuce. But the real agricultural portion of the Griscom country home is not here. To reach the farm, you drive out upon Gray's Lane, turn off upon a macadam road and pass through a beautiful, rolling farm country, with quaint old houses, monster trees, and fences that have stood for near a century. You enter the little village of Merion Square, whose trees seem to dwarf its houses; you pass the old, old inn, the two blacksmith shops, an antiquated church, and turn to the left upon a narrow, little sandy road. When you have driven something less than two miles you turn off upon a well-kept lane and follow downwards into a ravine between two ridges. Here is the farm which gives the only touch needed to make Dolobran into Arcadia.

Your first view may be disappointing. You do not see the broad, level fields, the trees, the orchards, and the country mansion you were expecting. On the other hand, you see two hillsides, cleared and green, with a herd of cattle, seventy-five in all, pasturing upon them. On the brow of the hill at the left are rows of corn shocks extending down the farther slope. Across the valley, to the right, is a view worth going far to see—miles upon miles of farms and trees and hills and farms again.

Nestled in the midst of the valley is a group of farm buildings. The houses are unpretentious; the largest a simple farmhouse occupied by the foreman. The rest are for the dairyman, milkers, and a dozen farm-hands. Off to the right, beyond the cattle, graze a herd of horses, and still beyond, on the crest of the eastward hill, is another little farmhouse. This was here before Mr. Griscom became an agriculturist. He chose to keep it and furnish it as his farmer home.

Here, installed as dairyman for Farmer Griscom is the ex-dairyman of

Farmer Cassatt—a swarthy son of the East Indias, who holds medals for butter making, and under whose care the cows of the Cassatt farm took prizes and the Cassatt butter came to be pronounced the very best of the farmer's club. Here you see Jerseys and Guernseys, Holsteins and Shorthorns, all with the unmistakable curves of the thoroughbred. You may see them ushered, two dozen at a time, into a stable as clean as a Fifth Avenue pavement, and watch them assail the mixtures of "chopped feed."

Here is one of which the owner is specially proud, because she gives twenty-four quarts of milk. Yonder is a Jersey giving less milk—but a winner for richness. Over there are two which the dairyman wants to sell, but the owner says him nay; for the owner believes there is good in those cows and that the good points may be bred into their daughters. The owner is ever in touch with his farm, and has taken as much pride in the improvement of his cattle as in the development of his steamship lines.

Of three hundred quarts of milk yielded here daily, ninety go to Haverford to be used by the inhabitants of Dolobran. A part is sold, and does its little towards paying for the cost of this pleasure. This gives a finishing touch by making the whole appear like a business venture—an amusement gains at least one-half if it has a business flavor. The rest is made into butter. Just now the matter of butter making is one of the owner's chief recreations. A clear, cold spring flows through tanks set below the level of the ground, and keeps milk and cream and butter near the freezing point. Old-fashioned hand separators will not do, and so a steam-engine is being installed to furnish power.

But better than all you have seen, more delightful to the heart of the owner than news from brokers and steamships, is the information which foreman or dairyman will whisper to you: At the last State fair farmer Griscom's Guernseys and farmer Griscom's butter took prizes, and in a little more time farmer Griscom will have beaten the other farmers to a standstill in this fine game of agriculture.

THE OLD AND THE NEW IN HARNESS TRAINING

By Gilbert Tompkins

THE developing work of the days of our fathers was a pretty tough proposition for man or beast. For the athlete, it was to get in all the beef that he could hold and then drill it out; for the horse, long-distance races on road or track, and the hardest of training—it could hardly be called conditioning, for that implies a certain improvement, and nothing of that kind could be looked for in the carrying out of a system which usually put those worked by it out of the game long before there was any genuine physical gain, unless it was in the capacity for some such work as mail carrying or pegging away over a milk route.

The past thirty or forty years have seen many changes in the beliefs and practice of the art, nearly all in the direction of progress; and there is much to be learned in the study of what has come and gone in training life.

There were a few men who trained athletes in modern ways even a generation or two ago; and the leaven of their efforts towards sensible methods changed the face of the situation, until the followers of the methods of the old schools are now as comparatively scarce as the men of advanced thought were in earlier days.

It is much the same with horses and their working. In Hiram Woodruff's time, which may be called the "befo'-de-wah" period of trotting-horse history, many of the races were at distances requiring supreme endurance; and the training was even harder than the racing. Extreme speed had little opportunity to develop, as the long-distance contests and the still longer drilling drives were most deadening. Our modern drawn-out heat contests are bad enough and fully deserve being called relics of barbarism; but they are exceptional rather than of ruling importance, and the work between races is but a fraction of what it used to be.

Most of the early trainers believed in

giving a horse fast work every day, in addition to miles and miles of body and soul destroying jogging. It was not at all uncommon to get a poor beast out at daylight and jog him an ordinary morning's journey, following with several heats of a mile, or over, at a speed-rate close to the animal's limit. And the next day and the next brought like troubles into the harassed life of the candidate for track honors, until one wonders that the survival of the toughest and most drillable could have left what good ones it did leave for the roads and the tracks of those days.

The first inkling of the wastefulness of this daily speed effort came in an interesting and somewhat roundabout way. The Civil War was followed by a great growth of the railway system of the country, and one of the semi-occasional booms in trotting stock was on at about the same time. The enthusiasm for trotting races spread rapidly, and the railroad expansion made it possible to campaign the best known of the harness racers over a large part of the country. Dan Mace, Budd Doble, Orrin Hickok, John Splan, Charles Marvin, and others too numerous to mention came into national prominence during the period covering the careers of Dexter, Goldsmith Maid, Lucy, Smuggler, and Rarus. Enormous crowds of sightseers turned out in those halcyon years of campaigning, and the broadening of the experience of trainers and caretakers had considerable influence on the development of the entire system.

In what may be called the early part of the campaigning era the old method of daily workouts was still in use, and journeys which would keep the horses on the railway cars for two or three days were then shunned whenever it was possible to avoid them. But to the surprise of all concerned, it began to be noticed that the longer the journey the better after it did some horses trot.

This was a puzzler; and simple as it

looks in the hindsight of to-day, it was some time before the trainers realized that the comparative rest of the journey was what put the new trotting life into a campaigner.

Once the idea of giving resting days between workouts had taken root, the national genius for experimenting was given free scope; and experience has since shown that the average horse needs in each week hardly more than one easy and another fairly stiff working, unless this gives way to a race. Occasionally but one working is given in every eight or ten days, as in the case of a delicate animal that gets off its feed if worked on the usual plan. Such are commonly called Sunday horses, and are extremely unpopular with the fraternity.

Plenty of vigorous effort still goes into these workouts, but the horse is prepared for that by the gradual way of the giving, and the care and rest of the in-between days. Even on the off days there is a great cut-down to the former quantity of work; the jogging decreases as the speed work of the workout days becomes more exacting. Instead of the long and exhausting road drives of former years, barely enough jogging is given in the training season to keep a horse limbered up and in healthy condition.

Feeding has improved in the same way; over-allowance of heating grain for a system already at the cooking point has been followed by a bill of fare that ranges from cooked mashies and the highly valued roots to green cornstalks—sweet preferred—and watermelon; with enough hay and oats to supply the sturdier portion of the diet. These give far better results through being blended with the cooling foods so grateful to overheated insides. Carrots, beets, and turnips are the most popular of the so-called roots.

It has been found, too, that the actual racing in itself is often such a stayer-up and stimulant that the intermediate work has in some instances been reduced even below the amount mentioned. One good campaigner of not long ago only wore his shoes for a few hours a week. He was a tried and tested racehorse, but had trouble with his feet; and his people

finally learned to pull off his shoes just as soon as a race was over. On the days that came between his races his caretaker would hook him up with as little harness as possible and to the lightest of road carts; the check would be tied into the throat-latch or taken off altogether, and the horse would be allowed to walk at his own sweet will through the pleasantest roads within reach. A grass stretch in the shade of tall trees was the best-liked footing, and there was no harm done if the faithful trotter made an impromptu lunch of any particularly attractive grass tufts. And so it would go until the day for the next week's race would come around, when the shoes would be put back on the earth-cooled and rested feet. Then he would go out for the fight as the war-horses of Scripture snorted for the fray.

Contrast this with the daily trouble so indiscriminately ladled out in former years to all trotters. Of course it must not be supposed that this scheme would work in every case. Its value lies both in the showing the unnecessary severity of the old methods, and in the indication given of a middle course that may be adapted to individual cases.

Say rather to a given class of cases; for training is not as individual as it is often claimed to be. Experienced observation is about the only guide for putting on the finishing touches in the preparation for a record performance, or for the working of a horse that is kept at a dangerously high limit compared with his natural abilities; but modern conditioning goes deeper than this, and concerns itself more particularly with the building up of the natural capacity of the animal, rather than with the taking a horse as he comes and stretching what ability there may be in him to the bursting point. "It's miles in three minutes as makes trotters," said a well-known caretaker and character, "and if you work the stuffing out of them, you deserve what you get."

In no other one direction has the general knowledge advanced further than it has in the realization of the benefits gained from moderate work at a gait which uses the muscular machinery in speed fashion, but without the strain of

trotting or pacing too near the animal's speed limit.

Through not taking this into account, some road drivers of to-day are rapidly getting unpleasant reputations; for with all the blessings of the speedways, it does not do to blind ourselves to the shortcomings of those who know not how to use our present great driving privileges without abusing them. Mere thoughtlessness is a poor and lame excuse for the overdriving that is too often seen on unusually pleasant days. The beauty of such weather is small comfort to a horse that is driven to a standstill, perhaps to his permanent injury in wind or limb. Send them along for all there is in them within the reasonable limits of good-gaited speed and endurance; but stop long before the sport shows signs of degenerating into brutality.

The results of the awakening to the real joys of the sport are being felt in many ways, notably in what concerns the study and regulation of trotting and pacing action. This has been taken up by hundreds of pleasure drivers, and there are to-day any quantity of professional and business men who are well versed and skilled in the laws of action and their application. Each horse is not a separate riddle or a Chinese puzzle, to be guessed or solved by traditional experiments. The applying of the laws that govern horse action must, to some extent, be based on average cases; and the advance of conditioning, gaiting, and balancing knowledge plainly shows that certain broad principles govern the educational work needed by practically all horses.

In old times they left out a lot of what now goes into a good job of shoeing for speed. The toes and heels are now measured to the smallest fraction of an inch; the angle made by the front wall of the hoof with its ground surface is taken as carefully as if it were part of a railroad survey. The foot is lifted up for trimming and put down again for examination until the responsible party in the matter is satisfied that the sides of the hoof are in the desired proportion to each other. The shoes are weighed as if they were to be paid for in a like weight of gold dust; and woe betide the nailer-on who lets a shoe slide back in

the nailing, thereby making it necessary to destroy the true line of the outer rim of the hoof by rasping off the part that sticks over and beyond the edge of the slid-back shoe.

Moderation in the use of weight is a most noticeable feature of the gaiting methods now in use. The old way was to use heavy shoes and pile on toe weights in the speeding education. Edwin Forrest carried something like thirty-six ounces on each front foot; the world's record was taken this season by The Abbot, who usually trots in nine-ounce front shoes. Bair, who drove Maud S. to her record, would never tell how much weight he did use on her; as nearly as it could be found out, she was trained with a little short of four pounds on each front foot, say forty-four ounces. When she took the world's record of 2:08 $\frac{3}{4}$, which still stands as the fastest mile ever trotted to a high-wheel sulky, she must have carried over twenty ounces on each front foot.

The strain of all this may be appreciated when one considers that in modern belief the best shoeing for a fast performance would be something on the order of a light coat of paint on the parts of the hoof that need protection. This is supposing that a sufficiently powerful protecting fluid could be found, and taking for granted the perfect muscular education of the horse in question.

For here is the real solution of much which has baffled balancing. As a boxer makes wrist muscle, as an oarsman develops his back and thighs, so must we perfect the motive machinery of horses. And it must be done by action-making methods in the slow preparation; when this is properly given, it frees speed from burdens that have no rightful place outside of the training ground.

When this specialization of any deficient muscle is equally well understood in the training of men, the advance in the average human athletic ability will be very marked. There is a prominent muscle found on the Greek statues that is now known as the "lost muscle," so completely have the changed conditions of human existence modified bodily conformation. Yet that particular muscle is almost the most important one in the whole body as a maker of running speed.

THE UNSPEAKABLE SPARROW

HOW TO GET RID OF THIS PEST

By Edward Brayton Clark

IN the bygone Aprils of the bird lover the far-reaching country roads were literally lined with song. Then there were to be heard in a sort of a sweet confusion the call of the flicker, the love note of the bluebird, the melody of the song sparrow, and if it were nearly May-day, the bubbling of the bobolink from the meadow. The country roads are still lined with song, but now every number of the bird concert is marred by a jarring note, and go where he will the lover of bird music still will find this same distressing bit of discord. The English sparrow, once seemingly content with city life, is now abroad in the land, and it is his rasping voice that breaks the harmony of the bird chorus.

Formerly, while deploring the fact that the oriole and the robin had been driven from town by the imported sparrow, people were given to contenting themselves by thinking that the birds had but moved on a little way, and that with-

out the walls they were safe from the assailing foreigner, and there they might be sought out and enjoyed as before. Now the English sparrows, apparently by sheer force of increase in numbers, have betaken themselves to the haunts once sacred to the tanager, the rosebreast, and the catbird.

In the country he carries on the same bullying tactics among the native birds that marked his urban career. The sparrow has been legislated against, bounties have been offered for his head, and still his tribe increases. Ornithologists and Audubonites apparently have given up in despair all thought of checking the pest. It would seem, though, that there must be some way adopted to eradicate the evil if the songsters which we know and love, and which our fathers knew and loved before us, are to be saved.

There seems to be an impression that the English sparrow contents itself with a little bullying of the native birds. It



Photo by William J. McBride.

WHEN THE SHRIKE HUNTS THE SPARROW.

does not bully simply. It kills. Five years ago I began a series of observations of the English sparrow, limiting myself strictly to its relations to the native birds. I entered into no question of the sparrow's food. For the purpose of my investigation I cared not whether it ate canker worms or the farmer's corn. I wished only to settle forever to my own satisfaction, whatever I might do for that of others, whether or not the British bird was responsible beyond a peradventure for the desertion of the cities by our songsters, and for the decrease in their ranks in the suburban districts. At the end of five years I wish to say that on the credit side of the sparrow's ledger there is not one line, while the other is black with demerit marks.

Those bird students are few who have heard the wooing note of the woodcock and have seen the bird perform its aerial gymnastics for the benefit of its hidden mate. Only one or two good descriptions of the courtship of this king of game birds have been written. Every amateur and professional ornithologist is anxious to see and to hear for himself. After lying in wait spring in and spring out in damp thickets supposed to be woodcock retreats, and never having seen so much as a feather nor having heard anything but the voice of the hyla, I gave up all thought of ever being a witness and an auditor of a woodcock's wooing. One night, however, in passing a thicket near Fort Sheridan, Ill., I heard a musical, whirring noise. Looking upwards over the tops of the undergrowth which sprang from the dank soil, I saw against the gray evening sky a woodcock circling and making the noise which had attracted my attention. In a moment he had dropped like a shot into the thicket, and as he disappeared there came a sound like the dripping of water into a pool. He rose again, and once more began his circular movement, while the droning, musical hum which I had heard before continued.

Just as I was congratulating myself that I would see to the end that which for years I had waited, two little forms darted out from a scrub oak at my right. It was deepening dusk, when all well-conditioned daybirds should have been asleep.

The two forms were feathered, and they were those of English sparrows, which were not content to rest while any fair game in the shape of a bird of long American ancestry was abroad. One of the sparrows fairly bunted into the circling bird, which, taken unawares, half fell, half fluttered to the ground. Then the bullies returned to the oak, satisfied, perhaps, that they had ruined the first and last chance that the observer had ever had of witnessing a woodcock's wooing.

It would strike the average ornithologist, it seems to me, even though he be an amateur, that if an English sparrow would go hawking at night in the woods for a woodcock, its daytime depredations might be worth watching. That interrupted bird-wooing was the beginning of my sparrow studies.

Lincoln Park, Chicago, with its great trees, its thickets, its lagoons, and its long shore-line washed by Lake Michigan, is a famous dropping-in place for the birds in their spring and autumn migrations. If they knew of the sparrow hordes that await them there the songsters would pass on into the night for a more friendly field.

Dearborn Avenue, leading to the Park, is lined with shade trees. One morning in early May I was passing through this thoroughfare, and when near the park angry sparrow voices coming from a tree-top attracted my attention. The season was advanced and the trees were well budded, but looking up I could see a slight commotion among the upper branches. Then there came fluttering to the ground at my feet a Parula warbler, one of the gems of the bird kingdom. It was followed all the way from the tree-top by two English sparrows, one on either side, and each pecking and beating with its wings the poor innocent with all the sparrow strength and viciousness. The assailants did not stop their work until their victim was on the ground. I drove them off and picked up the warbler. It was close to death. I kept it with me for two hours and then placed it on the branch of a bush, where it clung feebly. Doubtless it would have been a mercy to have killed it, but the heart was wanting.

Near the very heart of Lincoln Park is a pond filled in the later season of the year with variegated lilies. It is here to frighten it from its retreat. Only twice in the migrations have I heard the water-thrush sing, once in the depths of



Photo by William J. McBride.

WHERE THE BITTERN "DRIVES HIS STAKE."

that the Louisiana water-thrush loves to tarry in the early mornings of the spring days before the park frequenters come a wooded ravine at Lake Forest and once at the edge of this lily pond, within sound of the rumbling of cable cars on

the one side and the roaring of the park lion on the other.

While listening to the note of this little spring visitant in Lincoln Park I forgot all about the English sparrows. They are not of a kind, however, to let their pestilential presence long remain unknown. They heard the notes of that sweet singer of the waterside almost as quickly as I did, and from every side they flocked in, and by united assault put to an end the song of that feathered native American who was presumptuous enough in their neighborhood to raise a morning hymn. The sparrows drove the thrush from his retreat, and chased him over the hill towards the lagoon. Since that day I have seen a few Louisiana water-thrushes in Lincoln Park, but I have never found one with courage enough to sing the song to tell how glad he was that he was getting near home once more.

Once a blundering American bittern found his way to the edge of Willow Island at the south end of Lincoln Park. He was a stranger and a pilgrim, and no sooner had he dropped down to rest at the end of his long night's journey than he found himself the center of attraction for several scores of English sparrows. I caught sight of the bittern as he stood motionless at the water's edge. The Babel of noise which the sparrows were making drew my attention to the spot. The bog king was completely surrounded by the bullying Britishers, not one of whom, however, dared to approach nearer than three feet of the visitor. They stood off and scolded and doubtless swore at him, but he paid no attention, standing after the manner of his kind as motionless as the figure of General Grant which towered in bronze just beyond. A small bird will rarely attack a larger one while the latter is at rest, but let the big one once take wing, and the little one will be after him, delivering pecks like so many well-directed darts.

A boat shot round the end of the island and put the bittern to flight. The instant he took wing the army of sparrows was upon him. They pelted him with blows on his head, back, sides, and wings. They appeared actually to impede the big fellow's flight. Finally he

sought refuge on a little wooded peninsula that juts into the pond. When he was at rest again the sparrows once more stood in a circle about him or perched on the low-hanging branches above his head, and took up again the round of sparrow oaths. The bird did not appear to have sense enough left to mount above the tree-tops and seek some place where a bittern may rest and have nothing but the genial companionship of the marsh wrens, the swamp sparrows and the redwings.

He remained about the pond for the better part of the day, being frightened now and then into flight by approaching park frequenters, and every time he tried a trip, no matter how short, he bore the brunt of assault from the sparrow horde. During nearly all the time of his stay he was closely watched through a field-glass, and as far as could be determined he made no attempt to find food, a statement, by the way, that is equally true of his train of persecutors, who seemed to prefer bullying to breakfast.

On the morning of the day when the Parula warbler was all but killed by the two sparrows in joint assault, a company of myrtle birds was busy snapping up insect trifles in a clump of trees just north of the Lincoln Park electric fountain. I watched them for a while, and congratulated myself, and incidentally the myrtle birds, that there were no sparrows about. Useless congratulation, for, like the Assyrians that they are, the sparrows came down. There were two of them at least to every warbler, and with combined ranks they drove the insect eaters from their breakfast tables and far out of sight and hearing to the north.

As far as the family of warblers is concerned, I have seen eleven species and hundreds of individuals viciously assaulted by the bird which some hopelessly thoughtless experimenter brought to our doors years ago. The warbler observations were all made in Lincoln Park, a place where, without going into details of individual cases, I have seen the imported English pests harass the flickers, the redheads, the downies, and the sapsuckers among the woodpeckers, until

they were not only driven from their immediate feeding places, but from the park itself. I have seen the sparrows assault the kingfishers along the lagoon, the kinglets in the bushes, and the juncos, the fox sparrows and the white throats on the ground. I have seen them tear to pieces in other places the nests of the robin, the oriole, the chipping sparrow and the rose-breasted grosbeak. The only one of the summer visitants that I have found in the least able to care for himself when the sparrow is about is the pugnacious purple martin.

There is a one-story building standing within sixty feet of the crossing of Chicago Avenue and North Clark Street, one of the busiest parts of the North Side of Chicago. Upon three short poles on the roof of this building are some small bird houses. Of these the sparrows took possession, but they were routed from their holdings by the purple martins, who gave battle for the home sites, and there this season successfully raised their broods, masters of the situation.

For two seasons in Highland Park, a suburb of Chicago, there has been a battle royal between the martins and the sparrows for the possession of the electric-light hoods for nesting places. Apparently neither side has won. The entering of a martin into one of the hoods would be the signal for the departure for a sparrow, and the reverse. At the time that young martins should have appeared there were none in evidence about the nesting places, and young sparrows were also absent. The eggs of both species were found in the same nest, but as far as could be ascertained there were no young for the martins to lead to the southland in the fall.

I watched this sparrow-martin warfare in Highland Park for some time, but never had an opportunity of examining the nests. The statement that the eggs of both martin and sparrow were found together was given me by Mr. Ruthven Deane, President of the Illinois Audubon Society and an active member of the American Ornithological Union.



Photo by William J. McBride.

WHERE THE WATER-THRUSH TARRIES.

The Unspeakable Sparrow

A pair of robins arrived in Highland Park in April and chose the top of a window blind on the residence of M. R. Bortree, an ardent bird student, as the site of their summer home. The top of the blind was so narrow that it afforded an

in a hollow wooden pillar on the piazza of Mr. Bortree's residence.

It is only when winter comes to us in this northern Illinois country that watching the English sparrow becomes a thorough enjoyment. Then the bullying



Photo by William J. McBride.

THE HAUNT OF CATBIRD AND TANAGER.

insecure base for the nest, and twice the structure fell to the ground when but partly completed. The robins were about to make the third attempt, when Mr. Bortree nailed a shingle to the top of the blind. The birds showed their appreciation by using the shingle's broad base for the foundation of their residence. The English sparrows watched the robins at work, but made no attempt to interfere with the house-making or the house-keeping until the morning that the young were hatched. Then the sparrows came, tore the nest apart, and pitched out the young birds to their death below. They were seen to do this, but they did it so quickly that interference was impossible. The sparrows also routed out and drove away a pair of blue-birds that attempted to make their home

braggart of the summer time becomes the most abject coward. He is stricken with fear, and he shows it in every tail flirt and wing stroke. That terror of the north, the great American shrike, has come south a little way to pass the snow-bound months. The shrikes are plentiful in the tree-lined residence streets of Chicago, in the city parks, in the suburbs, and in the country farther on. Their daily prey is the sparrow, and as victims are plentiful, the shrike lives upon his favorite tidbit, sparrow brains. The bodies he discards or hangs up for future possible need. The shrike's hunt of the sparrow and the subsequent butchering operation are unquestionably cruel, but when one knows that the victims are the little feathered devils that have driven from our lives during the

past few years so much of color and of song, he may not, I think, be blamed for looking with a little exultation in his heart at the spectacle of a sparrow being slaughtered to make the supper of a shrike.

It may not be out of place to give a few suggestions for ridding the country of this sparrow pest. Experiments have shown that the plague may be checked if not eradicated by the taking of heroic measures. If the bird lovers of the country will act together it is possible even yet to make a rare bird out of this noxious "Avian rat."

It should be known at the start, however, that the battle against the sparrows will not be as hard to win as the one which must be waged against the influence of those people who, moved by a mistaken sympathy and a mawkish sentiment, will do all in their power to prevent the prosecution of the work of extermination. Every one knows the result of the sparrow crusade in Boston. There success in the abating of the evil seemed almost assured when persons who said that they were humanitarians stepped in, and on the ground that tearing down sparrows' nests was cruel, stopped further proceedings. The Queen's feathered army held the historic Common, while the American robin and oriole, to whom the great elms and the maples once were sacred, passed on into the country.

A different story comes from Cheyenne. In that Wyoming city four years ago there were countless thousands of sparrows. To-day a search of hours is necessary to find a single sparrow specimen. Mr. Lange in his book "Our Native Birds" tells how Frank Bond, a bird lover of Wyoming, rid the State's capital city of the plague. Mr. Bond's method may be used anywhere by responsible persons who will take due care and precaution. In the fall and winter the sparrows feed in great flocks. If their

favorite feeding grounds be noted and a bare spot near it be strewn sparingly with poisoned wheat, there will soon be a harvest of the only good sparrows—dead ones. The place where the poisoned wheat is thrown should be watched, and when the sparrows have finished their final feast the remaining wheat should be swept up and destroyed.

This method requires time and patience, but by its employment one person may do away with thousands of the sparrows in a single season. The grain should be prepared in this way: Mix a drachm of strychnia with three quarts of boiling water. Let the mixture boil until the poison is thoroughly dissolved. Into the poisoned water pour a sufficient quantity of wheat to absorb the liquid. Put the mixture aside for forty-eight hours. The wheat will be found to have swollen greatly. Spread it over the bottom of a large pan and place it in an oven until thoroughly dry. It must not, however, be allowed to scorch in the least. English sparrows consider wheat prepared in this way a tidbit. It gives to them a swift and painless death.

If there be objection to the poisoning method, the sparrow pest may be checked by the systematic destruction of the nests in the spring. If the lovers of our native birds will see that all the sparrow nests in their neighborhood are destroyed the good work will be extended like a chain all over the country, for the songsters' friends in these days are legion. If every attempt of a pair of sparrows to nest is checked through a period of six weeks the birds will give over all thought of a progeny for the season. The garden hose is an able assistant in the work of destruction of sparrow nests.

The work of sparrow extermination may seem intrinsically cruel, but it is prompted solely by the desire to protect the American songster against the alien savage and his encroachments.



"ON THE EDGE OF A CLIFF, WELL TOWARDS THE SUMMIT OF THE MOUNTAIN."

WINTER HUNTING OF GOAT AND SHEEP IN THE ROCKIES

By J. W. Schultz

WHEN viewed from the plains of the eastern slope in winter, the northern Montana Rockies present a most forbidding aspect. Except where patches of timber darken their sides, they loom up cold and white, covered with a mantle of snow many feet in depth, and for days at a time their summits and needle-like peaks are lost in a swirl of gray storm-clouds.

One would naturally think that at this inclement season the sportsman, no matter how enthusiastic, would be content to look at them from the windows of his cosy ranch instead of planning how to invade their snow-bound fastnesses. But autumn after autumn I had traveled among them with a pack-train, and I had come to believe that if certain obstacles could be overcome, a winter hunt might prove a better way in which to secure a head or two of mountain game.

I have tried it, and talk no more to me of pack-trains and the back of a wall-eyed cayuse, ye summers-day hunters! I have experienced all the woes inseparable from their use. Have I not cut trails for them through miles of down timber, brush, and lodge-pole pines standing as thick as hair on a dog's back? Have I not helped yank every animal out of each succeeding mud-hole and bog? Have I not run until my breath was spent, and fallen a thousand times, and skinned my shins, and had my eyes nearly gouged out by the brush, in vain attempts to drive the beasts back into the trail which they never would follow? And haven't I been moved to deep anger at their obstinacy? I am done with them forever! I have found more tractable servants; the snowshoe has taken their place. In my stable hangs a long row of pack-saddles, panniers, swing and lash ropes, and cinchas; I shall give them to my bitterest enemy, and advise him to go on a long mountain hunt with a pack-train.

On each of our winter hunts we

divided our hunt into two parts. First, a few days on the summit of the range for goats, and then a short trip to the mountains of the eastern slope for bighorn. We were accompanied both trips by Jack Monroe and Joe Carney, two of the best guides and mountain men in the West, and to whose untiring efforts our success was in a large measure due.

Leaving the cars at Bear Creek section-house, seven miles west of the summit, inside of an hour we had our packs all arranged, and strapping on our snowshoes walked northeast for three miles, through a low pass, to Oley Creek. The snow was very deep, some seven or eight feet on the level, and from twenty to thirty where it had drifted, but it was so well settled and firm that the bows of our shoes did not sink below the surface. At the end of the pass we descended a long, steep hill into the valley, and turned up it towards the summit of the great range.

We had made barely a quarter of a mile when we came to a yard of elk, but did not molest them, as they were not the kind of game we were after; and, then, no sportsman would take such a mean advantage of them. Their trails from patch to patch of willows were so deep that their backs were nearly on a level with the surface of the snow, and as they could make but little progress should they leave these trails, there was no help for them had we chosen to turn butchers.

Oley Creek valley is very narrow, seldom exceeding two hundred yards in width. On each side of it the mountains rise to a great height, those on the north being generally a succession of bare, rocky ledges rising one on top of another to the very summits, while those on the south side have more gradual slopes and are heavily timbered. Proceeding up the valley for four miles, we came to our old camping ground, a sheltered place under the spreading branches of a mighty fir.



THE FIRST GOAT.

It was barely three hours since we had left the section-house. It had taken us a long summer's day a year or two previous to make the same journey with pack-train. And how contentedly, how easily we had skimmed over the level surface of the snow, which deeply covered the brush and down timber, the bogs, and boulder-strewn stream

TIRED! PASS BETWEEN BEAR CREEK SECTION
AND OLNEY CREEK.

we had formerly labored so hard to get our horses through! There can be but one better way than on snowshoes to enjoy a mountain hunt, and that will be when we are provided with aerial ships.

With our one shovel, and snowshoes answering the same purpose, we soon cleared a space upon which to erect our tent, cutting small, dry firs for the ridge and supporting poles. Then we made a bed of balsam boughs two feet thick in the back half of the tent, placed a wagon-sheet on it, laid our sleeping bags on that, all in a row, and folded the sheet back over them. Next we put up our stove, and the camp was complete. I must say a word about the stove; it was a bottomless, flat-folding affair, with three joints of telescoping pipe, presented to us by Mr. W. H. Mullens, of metal boat fame. For its foundation and bottom we built a platform of large, flat rocks, which absorbed great quantities of heat when a fire was going, and gave it out so slowly at night that the tent was always warm and comfortable. Often, before morning, our thermometer out in the brush registered 30° below zero and more, yet water in the bucket inside never froze.

When we arose in the morning, while all was still and pleasant in the valley, a severe wind-storm was raging higher up, concealing the mountains in one vast whirl of flying and drifting snow. Our Eastern friends were much disappointed at the prospect, as there was no use of trying to hunt while the wind blew so fiercely, and they had each hoped to kill a goat that day. We managed, however, to put in the day and evening quite comfortably, cooking and eating half a dozen meals, napping, and planning the morrow's campaign.

The next day was cold and clear, the mountains looming up on all sides with dazzling brightness. After an early breakfast Jack and G. started to climb the mountain directly north of camp, while M. and Carney went up the valley to hunt the next one beyond. It was my day to cook, but about noon, having everything in shape, I started out with my telescope, a powerful glass of thirty-five diameters, to have a look at the country.

There was a bare crag jutting out from the hillside just above camp, affording a good view of the mountains on the opposite side of the valley, the southern faces of them, where the goats remain in winter. Having arrived at the top, I made a seat of the snowshoes, adjusted the glass, and began to look for goats and some signs of my companions. There was the trail of Jack and G., where they had climbed a long, open gash in the mountain side, the result of a snowslide in years gone by. Their shoeprints were visible clear to the upper end of it, and then were hidden by a projecting ledge.

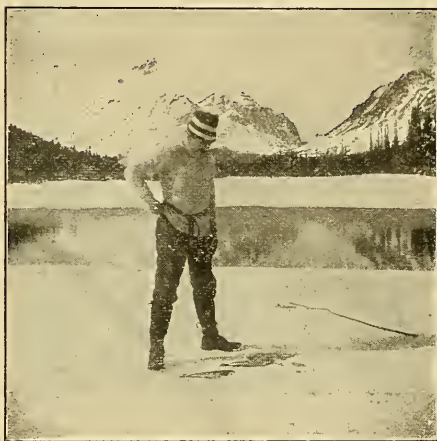
On the east end of this mountain there were three goats, a nanny, a yearling, and a kid, leisurely crossing a narrow ridge which the wind had swept bare of snow. Turning the glass on the next mountain east, a large billy-goat came into the field at once. He was sitting on the edge of a cliff well towards the summit of the mountain. Yes, sitting down on his haunches just as a dog or cat does! The goat is the only ruminant which assumes such a posture, and he certainly presents a most ludicrous figure when he does it. Having no neck to speak of, his head seems to have been shrunk to the body, his buffalo-like hump and long, coarse mane rising even above the slender and scimeter-like horns. The expression of his countenance—if the term may be used—is one of silly vacuity; the narrow forehead is dished, the muzzle long and coarse, and on his chin he wears a patriarchal beard simply absurd. Another peculiarity is that his fore legs are covered to the knees with a growth of very long and fluffy hair.

As I continued to study the outlines of this particular ungainly beast he arose and walked to the back of the ledge, and then returned and seemed to stare at something below him and to his left. Dropping the glass in that direction, M. and Carney appeared, crossing a long and very steep incline, where the snow was so hard that they had removed their webs and were punching holes with their gunstocks to secure footholds.

Not far ahead of them the incline ended against a series of cut walls and ledges, and on a narrow shelf, below which there was a sheer fall of several

hundred feet, I discovered another billy, a very large old fellow, comfortably sprawled out beneath a stunted and spreading pine. Occasionally he would reach up and nip a mouthful of needles from the overhanging boughs, chewing it with as much relish apparently as if 'twas the choicest of green and tender grasses. Throughout the winter the leaves of the evergreens—the pine, fir, spruce, and juniper—seem to be the goats' only food.

Owing to the convexity of the incline the hunters were crossing, this billy was all unconscious of the danger approaching him; but the other one, several hun-



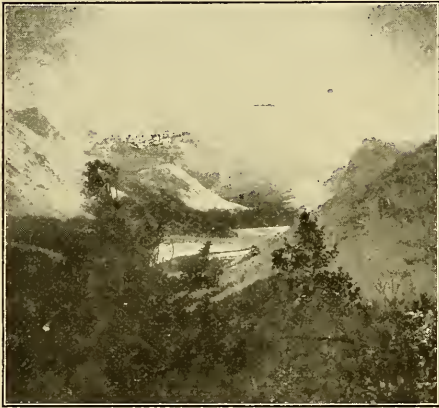
FISHING THROUGH THE ICE
AT TWO MEDICINE LAKE.

dred yards higher up the mountain, was getting rather uneasy, walking back and forth on the ledge, and stamping his fore feet, as if uncertain what to do. Finally, with one last foolish stare at the men below, he left the cliff and climbed up over the summit of the mountain. He didn't run; a goat has to be very badly scared to do that, and when he does strike such an unusual gait, he lumbers off about as swiftly and gracefully as a fat old cow.

M. had now approached within fifty yards of the goat, and was preparing to shoot; the animal had raised up on its fore legs and was looking at him, when he brought the gun to his shoulder, and a

second later I saw the beast collapse, give one convulsive kick, and slide down to the very edge of the cliff, where it lay quite still. The little 30-30 Winchester had done good work, as usual. I saw no smoke, heard no report.

The goat lay in such a position that it was an extremely perilous task to get to him, as the ledge had a steep slope from where he had lain to the verge of it where he had fortunately stopped. But Carney was equal to the occasion. I held my breath, though, as I watched him slowly descend, cutting footholds as he went, for a single misstep would have taken him down over the high, beetling



MIDDLE TWO MEDICINE LAKE.

cliff. At last he reached the animal, fastened his rope to its head, and then as carefully ascending to where M. stood, they dragged the animal up and out on the incline. Even that was not a very safe place, for had they slipped, they would have gone sliding down over the hard snow for five hundred yards or more to the foot of the mountain.

In an hour or so M. and Carney returned to camp with the head and skin of the big billy-goat, well pleased with their success. A little later the others came in, very tired, and cursing guns and gun-makers generally. After a long and difficult climb they had managed to get within fifty feet of a fine billy, and G. had pulled the trigger on every one of his ten cartridges, but not one of them would explode. Finally, after the goat had

calmly climbed up to the next ledge, and sat down to stupidly gaze at them again, they examined the rifle, and found that the point of the firing pin was broken off. It was a new weapon, had been tested and resighted in New York only a week previously, and had then been in perfect order.

The next morning M. declared that he was more than satisfied with the trophy he had secured, and would hunt goats no more that season; so G. took his rifle, and with Jack went up to where they had left the goat the day before. They were back in camp at three o'clock with its head and hide. We packed up then and there, and shortly after nightfall arrived at Bear Creek section-house, well pleased with our goat hunt.

At one o'clock the next morning the east-bound Overland Flyer stopped on a stretch of bare, bleak prairie at the edge of the foothills, and let us off. It was bitterly cold, and a keen wind was blowing, as it ever does on these plains in winter. But we didn't mind that; having got our duffle out of the baggage-car, we crawled into our sleeping bags and rested well until daylight. One of the party said that four or five freight trains passed by during the night, but the rest of us heard them not.

Crawling out of sleeping bags at daylight, we ran over a little hill and down to the cabin of a settler, whom we aroused and induced to cook breakfast, and then haul our outfit to the head of Two Medicine Lake, some five miles northwest of his ranch. We arrived there at three o'clock, and had everything in shape before dark.

This north fork of the Two Medicine has its source in some basins far back in the mountains, and is fed by the everlasting ice and snow which lies on the flanks of the main range. There are three beautiful lakes on its course through the mountains, and our camp was situated on the lower one. On both sides of us the mountains were rather low, sloping, and easily climbed, and their sides and summits were covered with patches of short grass, which the wind kept bare of snow. It is this grass which attracts the bighorn from their summer range farther back in the mountains, and here

they remain from November until late in May, until after the young are born, when they once more return to the higher and more inaccessible peaks.

For three days after we pitched camp here there was such a severe storm in the mountains that we did not attempt to climb them. But there were other things to do to keep us busy; the lake teems with trout, and we kept the table well supplied with them by fishing through holes cut in the ice. A most unsportsmanlike proceeding, 'tis true, but excusable, as our commissary was running low, and 'twas fish or starve. Then there were grouse, ruffed, blue, and Franklins, and we managed to secure a number of them by diligently tramping through the thick pines and willows.

At last, one morning the sun arose in a cloudless sky; G. had luckily borrowed a rifle from the old settler, and after a hasty breakfast we started out, Jack and G. up the valley, the rest of us towards the first mountain northwest of camp. After going a mile or two, we saw fresh tracks along its side and summit, and with our glasses counted twenty-three sheep, but none were the kind we were looking for—old rams. So, instead of climbing it, we kept well down in the timber until we had passed its upper end, where a wide, sloping basin separates it from the next mountain beyond.

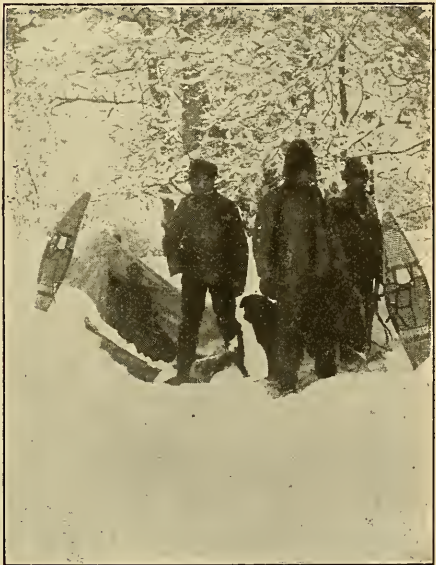
We were just rounding a point of reef rock, and fortunately still in the timber, when we sighted a band of eleven sheep on the farther side of the basin, and pretty high up. Bringing the glasses to bear on them, we found that they were rams, all but two of them carrying immense horns. We saw, too, that there was no possible way of getting within five hundred yards of them. Well, we sat there in the pines all day, hoping that they would come down the hill or move to some place where they could be approached; but they didn't do any such thing, remaining on a bare grass patch not two hundred yards square. They were, as ever, extremely restless, alternately feeding and lying down every few minutes, but never forgetting to keep a sharp lookout on the heights above them and in the valley below. We stayed watching them as long as we possibly



OUR SNOWSHOES.

could, and then sneaked away unobserved. We found G. and Jack at camp, and the evening meal awaiting us. They had been up the valley as far as the middle lake and had seen a number of sheep, but no rams.

The next morning M. asked G. to go with him after the eleven rams, but the latter refused. "It's your bunch," he said, "and one man can approach them more easily than two. Never mind me;



IN CAMP AT TWO MEDICINE LAKE.

Jack and I will try to find some up above the next lake."

That was quite sportsmanlike and proper; but, alas! how many men I have known who called themselves sportsmen who would have rushed out to that ram patch without an invitation, and spoiled every one's sport.



VERILY, PATIENCE HATH ITS REWARD!"

For six consecutive days M. and Carney started out at daylight and tried to get within range of those eleven rams, but something always interfered with their plans; either the wind was wrong, or the band was in an inaccessible place, or a blizzard came up, or a band of ewes were between them and the coveted prizes. In the meantime G. succeeded in killing a fine ram, and it was lucky that he did, for we had nothing but a little flour left in the commissary.

On the morning of the seventh day we breakfasted on meat straight, washed

down with cold water, which Carney declared was a sign of good luck; and so it proved to be. Arrived at their lookout place, the hunters found that the rams had moved around to the right side of the basin, and that by keeping behind a low rock-reef it might be possible to get within three hundred yards of them. M. essayed it, leaving Carney in the pines. There was an open space of five hundred yards to be crossed before the reef would shut off a view of him, and it took three long hours of crawling and sliding through the snow to do it. When the sheep had their heads down, feeding, he moved on, and when they looked up he laid still, often remaining in the latter position so long that he got thoroughly chilled.

At last the reef arose between them, and he walked quickly up to its base, rested a moment, and peered around the end; then up went the rifle to his shoulder and he fired at the uppermost ram. The bullet hit him, for he was seen to flinch, and then, bunching up, the whole band came pell-mell down the mountain straight by where M. stood behind the rock. Now was his opportunity come, indeed; as they rushed by him, he fired four shots, and, one after another, four fine rams keeled over in the snow within a space of thirty yards. "Verily, patience hath its reward!"

So ended our second winter's hunt, and we all agreed that the only easy way to get at sheep and goats is on snowshoes. We have also proved, to our own satisfaction at least, that there is no hardship in camping out in the coldest weather. The Klondike has no terrors for us now.



PIONEER AMERICAN SPORTSMEN

By Charles Hallock



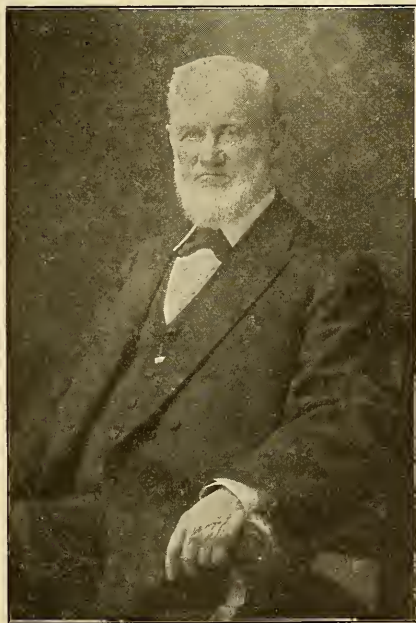
THADDEUS NORRIS IN 1872.

leisure. This ruling bars the *virī homines* of this generation—the gods whom modern adolescents worship and pattern after—and a wail will go up before the steps of the high altar! But we must, nevertheless, hark back to the inevitable date-mark, “before the war”—the Civil War. And here in turn we have to jar the heroics of the opening century as well.

THE RUNIC AGE.

Time was when our people were too busy to play. Up to forty years ago they had not accumulated that wealth which now makes millionaires as plenty as blackberries, and enables them to gratify every impulse or proclivity, and to travel to the land's end in quest of adventure. In the earlier decades hunting and fishing were but incidents of a more or less woodsy environment, and of the set task of driving pioneer stakes. Fox hunting and horse racing were the fashionable diversions, especially at the South, and as early as 1829 the guild was represented by *The American Turf Register*, which was the pioneer of all American sporting papers. The name of Doswell was as current fifty years ago as Fitzsimmons is to-day. Ladies talked horse as they do golf now. Our forefathers

gunned and fished in a primitive way. They had not the inimitable appliances of the present age—no palatial yachts, no repeating arms, no exquisite fishing tackle, no cameras, no portable camps and compact outfits, no hygienic gymnasia, no rowing and regatta courses, no racing boat crews,* and no great diversity of out-of-door games. The ponderous Scribner, Welch, and Conroy rods of green heart and ash had spikes in the butts to hold them in the river bank when the biting was slack or the angler took his nooning, and the percussion-cap guns were supplemented with shot-pouches and powder-horns, to sling over the shoulders across the breast. Gunners crept on game and took pot shots. Only truants and idlers went fishing. Habitual woods stalkers were as “tackey” as modern tramps. Loafers and “old seeds” preëmpted the string-pieces on Northern wharves. Negroes and poor whites infested the bayous. Is this correct? I was one of the truants!

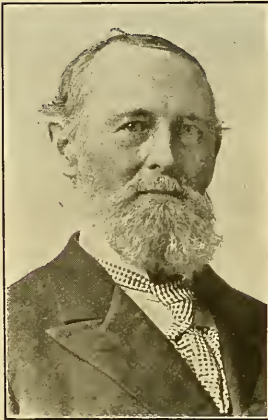


GEORGE A. BOARDMAN AT 81.

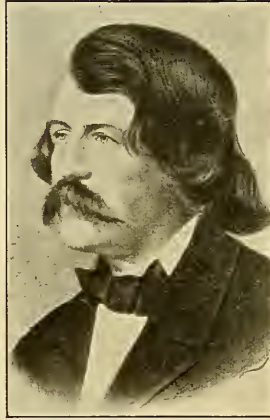
* Undine, at Yale in 1851, was the first.

Even to write of sport was unpopular in the early half of the century. "Frank Forester," mentor and coach to the rising sportsmen of America, himself testified in 1849, in speaking of N. P. Hawes, a most charming contributor to the old *Spirit of the Times*, who wrote under the pen name of "Cypress, Jr.," that "it was under the strictest seal of secrecy that he communicated his productions to the world. It was with fear and trembling, in some sort, that he saw himself in print, and with a firm conviction that if it should be discovered that he, a practising lawyer of high standing in New York, was actually guilty of the author-

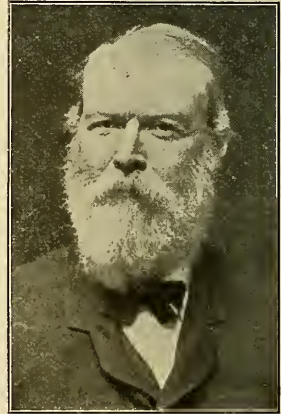
Aubrey, Choteau, Chavez, and the rest; and the details of United States troops who were afterwards sent to protect the Trail; and the Government surveys to the Northwest and Southwest, under Schoolcraft, Fremont, and Whipple, led by long-haired scouts like Kit Carson, Jim Bridger, and Hugh Monroe, who could read Indian sign offhand, and map the lie of the land. In 1846 rough riders like Crockett, Bowie, and Milam swarmed into Texas to take a hand in the Revolution and rope a few animals from the Mexican cavayard. In 1848 came the wild raid of the cattle men into the Spanish missions of California, and



ALEX. STARBUCK AT 76.



HENRY WM. HERBERT,
"FRANK FORESTER," IN 1854.



R. E. ROBINSON,
"UNCLE ELISHA," AT 65.

ship of *genre* sketches on sporting subjects his occupation was done forever! That to be an author first and then a lover of field sports must be the deep damnation of any lawyer."

THE HEROIC AGE.

Here, then, we have a tangible point of departure. We have to go back at least half a century to find eligibles for our list of worthies. Of course the first decade had its Nimrods, its woods rangers, and wilderness explorers, like Captain Pike, and Lewis, and Clark. They discovered the Rocky Mountain trout and whitefish in 1809. Then followed the pioneer fur trappers and plainsmen, who had a keen scent for game, and the Santa Fé traders in 1822,

next year the passing of the Forty-niners to the land of gold.

Meanwhile, George Catlin, the Indian artist, had been writing up and portraying in natural colors the varied phases of aboriginal life on the prairies, and Charles W. Webber had recorded the checkered adventures of a hunter-naturalist in Texas in 1845. Dr. Elisha Kent Kane, Engineer Melville, Captain Hall, and others investigated the Northwest passage, and Charles Joseph Latrobe wrote the "Rambler in North America" in 1836, which included a few fishing notes.

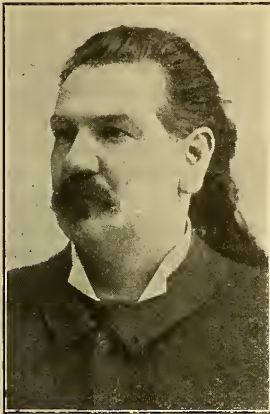
In 1848 Lieutenant Ruxton, the Englishman, portrayed so graphically his "Life in the Far West." "L'Acadie," a delightful idyl of the Canadian woods,

appeared in 1849. About the same time, or a little earlier, say in 1848, Charles Lanman, the Michigan angler, published his "Wilds of North America," in two large illustrated octavo volumes, as well as his "Tour of the Saguenay." Rev. Dr. Bethune issued his superb edition of Walton. Frank Forester had published his initial work on "Fish and Fishing," and William C. Prime commenced contributing his "Owl Creek Cabin Letters" to the *New York Journal of Commerce*.

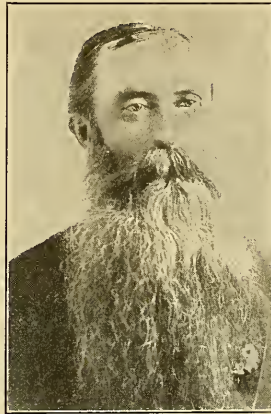
In the same year Theodatus Garlick, father of fish culture in America, also issued his progressive work under that title. But it was not until Max Green wrote up the charms of the Kansas re-

swell the list of honor men, every one a hero and all contemporary with Audubon and Bertram, and each a quondam personal friend? *Fiat justitia*.

Now let us begin: Rev. John Todd, Daniel Webster, Horatio Seymour, Fenimore Cooper, Bayard Taylor, Andrew Downs, George N. Lawrence, George A. Boardman, J. Ross Browne, R. H. Strother, John S. Springer, Mariner A. Wilder, Samuel C. Clarke, Isaac McLellan, Jacob Sleeper, Bernard Gilpin, Matthew Jones, Rev. M. Harvey, W. E. Cormack, William T. Porter, J. S. Skinner, Colonel F. G. Skinner, George Wilkes, Andrew H. Green, Genio C. Scott, Sanders D. Bruce, David Dudley Field,



D. FRANK POWELL AT 50,
"WHITE BEAVER."



DR. RAWLINGS YOUNG
IN 1874.



GEN. WM. D. WHIPPLE, U.S.A.,
AT 67.

gion in 1856, and Captain Randolph B. Marcy, U. S. A., published his "Prairie Traveler," with numerous itineraries, instructions for outfitting and directions for killing big game of all kinds that the sentiment of the chase took deep enough root to make such a coterie as the Boone and Crockett Club of to-day possible. And thus the gospel of the new dispensation was promulgated, and the inauguration of legitimate sport began—legitimate because it was under the laws of good order, health, and common sense. All of these forerunners in the wilderness are now dead but Prime. Shall the chronicler pause by the Lethe-side to dust their *immortelles* and indite a fitting epitaph? or shall he

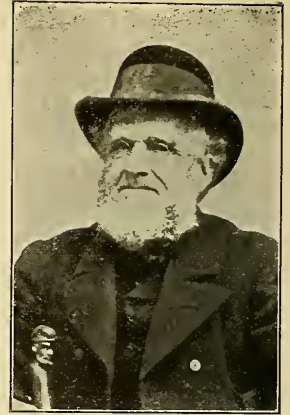
General G. W. Wingate, H. W. S. Cleveland, Thomas Logan, Joel T. Headley, General Thomas Jordan, Judge John D. Caton, Major H. W. Merrill, James Langan, the actor; Harry Venning, W. F. Whiteher, Alfred Craven, chief engineer of the Croton Water Construction; Sanford Gifford, the elder Beard, Martin J. Heade, and Walter Brackett, the last four all artists; Charles E. Whitehead, Fred Mather, E. J. Hooper, Willis Russell, the Pritchard brothers, who made the first split bamboo rods; General F. E. Spinner, Wade Hampton, Alexander Starbuck, Allan Gilmour, Isaac Thompson, P. L. Hatch, E. Z. C. Judson ("Ned Buntline"), Royal Phelps, Colonel Cecil Clay, Seth Green, Robert B. Roosevelt,



CHARLES E. WHITEHEAD
IN 1890.



J. M. GREGORY AT 64.



E. J. HOOPER IN 1874.

Clinton Gilbert, Seth Kinnan, known as "Old Grizzly;" Reuben Wood, General John McNulta, Andrew Clerk and his brother, Dr. Z. Clerk, B. C. Milam, who made the Kentucky reels; Charles F. Hotchkiss, Dr. H. C. Yoakum, Charles Cavileer, William Moorhead, and Norman Kitson, three Hudson Bay octogenarians for whom the northern border counties of Minnesota are named. Twenty of these passed the eighty-year limit, and five got well into the nineties. Fifteen are still living.

Rev. Dr. Todd wrote "Long Lake" (the Adirondacks) in 1850. Andrew Downs, a native of New Jersey, but a naturalized British subject, started the first zoo in America at Halifax, Nova Scotia, in 1852.

Boardman and Lawrence, naturalists of highest rank, donated rare collections of birds to natural history societies of Maine and New York.

Genio C. Scott wrote his comprehensive book on salt and fresh water angling in 1859.

Fred Mather was engaged in amateur bass and trout culture in the fifties. Wilder never failed to kill his annual moose in Nova Scotia for forty succes-

sive years. Heade was a phenomenal wing shot at eighty, and still hunts birds in Florida.

Walter Brackett, a noted salmon painter, is still killing salmon at seventy-seven.

General Spinner, of greenback fame, died in his fishing boat at eighty-seven.

Sam Clarke and his cousin, Isaac McLellan, of the same age, passed their ninety-first birthday together, and McLellan published a volume of poems, which were all composed subsequent to his eightieth year.

Major Merrill, a veteran of the old Seminole War, was a prolific writer on rifle practice and big game, and so was Colonel D. Pickett, of Montana. Mr. Mott could climb fences like a fox at eighty-four.

Judge Caton was the first taxonomic breeder of *cervida*. C. J. Brydges, the first president of the Grand Trunk Railway, was the Palinurus of the model horseboat on the Restigouche, known as "Great Caesar's Ghost."

"Ned Buntline" (Judson), soldier and sailor, wrote shooting sketches and sea stories of rare constructive merit, equal to Marryatt's, in the early fifties. In his



CHARLES HALLOCK,
AGED 62, IN 1895.

latter years he kept the American flag flying from the roof of his cottage in the Catskills.

Seth Green planted shad in Lake Ontario, lobsters and oysters on the Pacific, and salmon in the Hudson.

William C. Harris, editor of *Afield and Afloat*, *Nature's Realm*, and the *American Angler* for twenty years, and author of a stupendous work on the "Fishes of North America," in forty volumes, with portraits from life, which has already cost \$30,000 without being completed, is in his seventy-first year.

Richard H. Strother illustrated sports in Virginia in many volumes. J. Ross Browne described life in the Pacific Coast gold diggings. King Lear and Alexander Choquette were pioneer hunters and prospectors in Alaska before the cession.

Colonel F. G. Skinner, of *Turf, Field and Farm*, was a camp epicure, and one of few sportsmen who knew how to cook game *al fresco*. Andrew H. Green was a commissioner of Central Park in its beginning, and an advanced naturalist.

Colonel Bruce and his brother started the *Turf, Field and Farm* in 1865, directly after the secession Olympiad.*

Dudley Field was an efficient promoter of the Blooming Grove Park, the first game preserve in the United States. Whitehead, author of "Wild Sports of the South" and "Camp Fires of the Everglades," has been prominent as an author and sportsman for fifty years. Wade Hampton has been one of the foremost of all-round sportsmen for sixty years. Royal Phelps was President of the New York Association for Protection of Game for twenty years.

Isaac Thompson, of Ithaca, N. Y., a noted angler, and father of H. H. Thompson, of the Passaic Bank, died in 1886 at the advanced age of 94. Hooper was the first spoon troller for Sacramento salmon. Captain Bendine discovered the "redfish" of Idaho, and fly-fishing in the Clackamas, Oregon. He was the leading oologist of the world. Logan ("Gloan") and Cleveland wrote valuable manuals of rifle practice.

Daniel Fraser was head center among the Micmac Indians of the Bay Chaleur,

and, with John Mowat, resident riparian owners of the Matapedia and Restigouche salmon pools away back in the forties. Allan Gilmour and John Molson were the most noted salmon anglers of Canada in the mid-century. Leonard Jewell and J. H. Rich were noted woodsmen of Maine. John S. Skinner was the founder of the original *Spirit of the Times* in 1831.

General Wingate managed the Creedmoor rifle competitions of 1873-75. Bernard Gilpin wrote up the physiology and natural history of Sable Island in the fifties. Matthew Jones catalogued the fishes of Bermuda. W. E. Cormack first crossed the island of Newfoundland, and studied the woodland caribou. Rev. M. Harvey was the foremost naturalist of Newfoundland in the sixties. Springer wrote up "Forests and Forest Trees" in 1856.

Charles F. Hotchkiss was a famous salt-water angler of Long Island Sound in the forties, and thirty years later wrote up scraps of his life history in a volume entitled "On the Ebb." He was a California forty-niner, and took the first iron safe to San Francisco around Cape Horn. He was also the sheriff at Buffalo in the famous Morgan (F. A. M.) abduction case in the forties.

The editor of *OUTING* could not gather a more remarkable array of names; and yet there are scores of others which are equally familiar to the present generation. But their enumeration takes space, alack! and I forbear. The whole guild cannot be baptized at once! I trust my selection may not prove invidious.

"As life runs on the road goes strange
With faces new; and near the end
The milestones into headstones change,
'Neath every one a friend."

THE GOLDEN AGE.

Just here the chronicler might call his duty to his subject honorably discharged, and so gracefully subside, but there is such an afterglow to the close of the heroic period which has been reviewed, and so marked a presage to the Golden Age which succeeded, and seemed to culminate in 1890, that the pen would fain

* Olympiad: A Grecian epoch of four years' interval between the celebration of the Olympia games.

years' interval between the celebration of

follow the light. The epilogue will no doubt prove interesting. Let me revert:

The period from 1850 to 1875 was prolific in sportsmen's manuals and angling books. The first ten years produced "Fisher's Manual," Dr. Lewis's "American Sportsman," Girard's "Fresh Water Fishes," Frank Forester's "Field Sports," Suckley's Reports (published by Government in 1855), "Hudson Bay Life in the Wilds of North America," Elliott's "Carolina Sports," Hamilton's "Fishing in Canada, the St. Lawrence, and Its Tributaries," Hawker on Shooting, Frank Forester's "Dinks on the Dog," Dufferin's "Yachting in High Latitudes," and a number of minor works in French and English by James M. Le Moine.

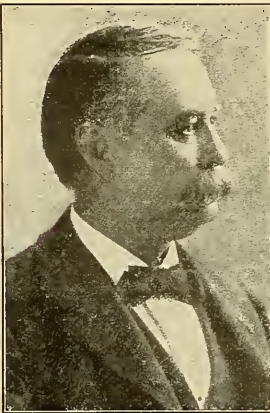
In the succeeding fifteen years Perley, Prime, Norris, Holbrook ("Fishes of South Carolina"), Roosevelt, Adirondack Murray, Oliver Gibbs ("Lake Popin Fish Chowder"), Scott, and Hallock all brought out angling books of substantial value. Norris produced the best angling work extant. Captain Dashwood's "Chiploquorgan" and Hardy's "Forest Life in Acadie" filled up the measure of the hunter's *repertoire*. Fry, Slack, and Stone added practical information on fish culture. Vennor, Coues, Minot, and Ober contributed valuable books on ornithology. Bogardus and Long issued manuals for trap and wild-fowl practice, and "an old gamekeeper" printed "Shooting on the Wing." Colonel Wingate issued a "Manual of Rifle Practice,"

Robert T. Vyner a "Treatise on Fox Hunting." Gibson and Batty published works on taxidermy. N. H. Bishop printed two books on long-distance canoe voyaging. Guide books and maps began to appear. Many excellent English encyclopedias, manuals, and miscellaneous books came from the press.

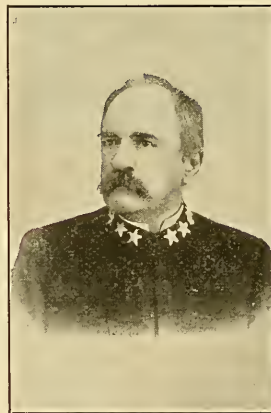
About 1860 the Smithsonian Institution began to put in efficient work. Spencer F. Baird was its animating spirit and mainspring.

The geological surveys under F. V. Hayden, George M. Wheeler, and G. W. Powell accomplished wonders in unmapped regions. From them emanated such workers as Holmes, Cushing, Coues, Bendine, George Bird Grinnell, J. H. Batty, and Dr. C. H. Merriam. Railroad surveys accomplished much for sport in the beginning of the *post bellum* period, and the United States Army, which protected them, did more.

Rudiments of camp life, sportsmanship, and field work were acquired in these practical schools by many an ambitious neophyte, yeapt tenderfoot. The *Forest and Stream*, which I established in 1873, after traveling the continent, became the medium for records of adventure and discovery in every branch of the service, out of which was evolved, incidentally, the secondary guild of plainsmen, like W. F. Cody, Dr. Frank Powell, William C. Carver, John Omohundro, and all the Texas Jacks and Texas Jims, swarthy, Indian-haired, brave, reckless, sharp-witted, and sure



AMOS. J. CUMMINGS.



ADMIRAL LESTER A. BEARDSLEE
AT C2.



CHARLES LANMAN IN 1856.

shots with rifle and pistol: at home on a mustang, and light of foot at a fandango.

Cody (Buffalo Bill) became a member of the Nebraska Legislature, and Dr. Powell a mayor of La Crosse, Wis. General James M. Brisbin, Colonel R. H. Dodge, General Rusling, Major Jacob Wagner, General Charles King, Major Augustus K. Egbert, the two Schofields, Drs. G. H. Moran, J. F. Head, C. F. McChesney, H. C. Yarrow, and no end of army surgeons wrote up the natural history and wild life of the borderland, the mountains, and plains.

The Golden Age fostered the growth of game and athletic clubs, canoe associations, kennel registers, and thoroughbreds in all lines. It gave birth to the American Fish Culturists' Association, organized by George Shepard Page in 1870, and to practical salt and fresh water fish culture, which Storer, Agassiz, DeKay, and Garlick had advocated years before. In the same year, 1870, the Blooming Grove Park game preserve of twenty-seven thousand acres in Pike County, Pa., was established by Fayette S. Giles. Of its original board of directors only Colonel Bruce, Lafayette Westbrook, George S. Greene, and the writer survive.

This progressive period also gave birth to a code of uniform laws for the protection of game, and a scheme for preserving our forests, which has finally crystallized into the establishment of numerous national parks and the rescue of the California redwoods. And during this epoch the indefatigable president of the Royal Historical Society of Canada, Sir James M. Le Moine, who was knighted by Queen Victoria for literary merit, produced no less than thirty volumes in French and English on history, ethnology, natural history, and sport. Dr. Elliott Coues got out an equal number of scientific works. And there was a whole constellation of brilliant writers, like Dr. Rawlings Young, Colonel James Gordon (Pious Jeems), Aleck Hunter, Colonel D. Pickett, Major Wagner, Harrison Gray Otis, S. D. Holder, J. U. Gregory, Charles S. Westcott (Homo), Rowland E. Robinson, Alexander Starbuck, president of the Cuvier Club, D. G. Elliot, F.R.S., Dr. C. J. Kenworthy, J. A. Allen, Dr. E. Sterling,

Charles Astor Bristed (Carl Benson), Kit Clarke, W. L. Colville (Dick Swiveller), Dr. M. G. Ellzey, W. O. Percy (Kit Kilbird), Colonel Thomas Pictou, T. S. Van Dyke, D. S. Libbey (Penobscot), Sheriff Mitchell, of Los Angeles; William N. Byers, J. H. Batty, Charles A. Zimmerman, the first camera fiend; T. P. Cantwell, A. N. Cheney, Major G. H. King, Dr. William Jarvis, D. C. Philips (El Comanche), J. H. Shultz, Jacob Pentz (Gopher), Ernest Ingersoll, J. Mortimer Murphy, J. A. Henshall, Charles J. Foster, Dr. N. Rowe (Mohawk), afterwards editor of the *American Field*; Francis Durivâge, George W. Strell, Rev. Clement French, the "Three Vans"—G. S. Van Cleaf, C. Van Brunt, and A. P. Van Giesen; Edwyn Sandys, and five hundred others, of more or less renown; of whom one hundred and sixty started sporting periodicals on their own hook. Most of these amateur journals shot the zenith like the rays which emanate from a sun about to set, and then dissolved in gloom and disappointment.

THE AGE MERCENARY.

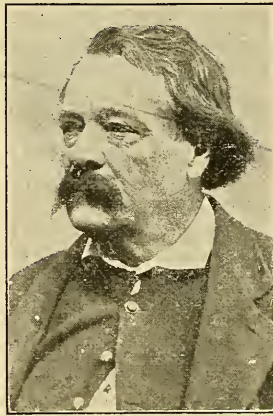
And now we have the Age Mercenary, the *fin de siècle*, redundant, ecstatic, flamboyant: no longer speculative and visionary, but replete with accomplished facts and realization; no longer a halcyon age, serene, contemplative, restful, and devoted to *dolce far niente*, but wearing, taxing, whirling, stimulating, full of ginger. Instead of a quiet siesta under the laurels, and the tinkle of the cow-bell by the brookside, it is nervous activity and competition everywhere, a tussle for position and the money prize which awaits the winner; an age when golf is played by the day, when fish are caught automatically, and everything is run by electricity and goes by with a whiz! Automobiles, trolleys, cycles, pneumatic mails, hot balls, two-minute horses, express elevators, flying machines, submarine torpedoes, ocean liners; and there are quick lunches, hurry calls, rush orders, lightning shaves, rapid-fire guns, machine loaders, railroad euchre, drive whist, hot-house peaches, force meat, cyclone hitters, rough riders, rubber-necks, new women, *enfants terrible*, and sixteen to one!

Here we have the essence of up-to-date sport. Everything is on a large scale and costs money. It is expensive. Football is no longer a pastime, but a battle royal. Baseball, outside of the colleges, is played for what there is in it. All the sports of the turf, field, regatta-course,

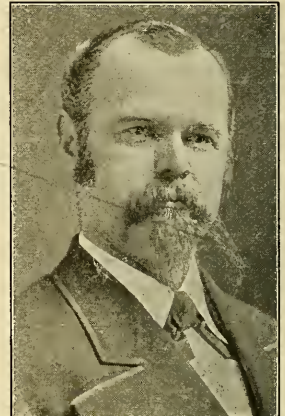
times most, now it is how to make them pay. The inspiring watchwords are "Gate money" and "Get thar, boys!" All this state of things does not make our young men less manly, of course, but it does make them less divine. It makes good and efficient soldiers, but it kills the



MAJOR AUGUSTUS R. EGBERT,
U.S.A., AT 50,
"MONMOUTH."



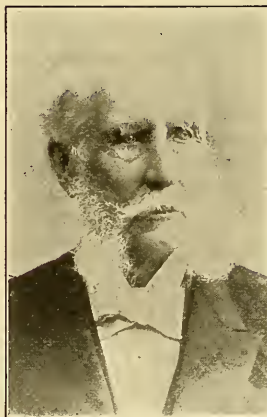
E. Z. C. JUDSON, 1899,
"NED BUNTLINE."



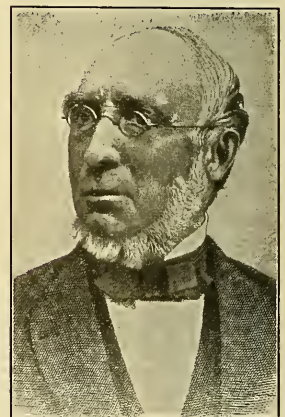
CHARLES E. BENDINE,
CAPT. 1ST CAVALRY, U.S.A.,
IN 1878.



SAMUEL C. CLARKE, AGED 90,
BORN 1806.



MARINER A. WILDER, AGED 78,
IN 1892.



GEORGE N. LAWRENCE
AT 91.

and campus make a business of winning rather than a pleasure of playing. The success of a tournament or competition is sized by the gate receipts. Games are played for the gain. Muscle, nerve, gall, confidence, assurance, influence, cash! These are the requisites for aspirants who would enter the lists.

Once our behest was to enjoy our pas-

kindly impulses and the finer sensibilities. It helps to wreck the Sabbath.

In these days there are wreaths for the battle-scarred champions, but no *bouttonnières* for the quiet gentleman sportsman; but all the same, this is the Age Transcendent. And we are back numbers, belonging to the Representative Sportsmen of Early Times.

THE DEATH OF THE RED-WINGED MALLARD

By H. S. Canfield

IT took Robert Lee Briggs five years, working off and on, to slay the red-winged mallard. The pursuit got to be so much of a passion with him that it hurt his business, for he was a market-hunter on the southwestern coast of Texas. In summer he caught red-snappers, pompanos, sheeps-heads, and turtles. All winter he shot ducks, snipe, and wild geese, which he sold to produce dealers in Corpus Christi. He put in so much time trying to kill the drake with the crimson feathers that the dealers were wroth. They said he was ruining one of the brightest careers that ever opened before a young man in the Southwest. If he had been a "lit'ry person" he would have thought of "John Burley," who was a constant fisher for a certain one-eyed perch, which as constantly gave him the perch-laugh. The perch-laugh consists in making three bubbles rise in rapid succession, then two slow bubbles, and then two fast ones.

Briggs was not a "lit'ry person." He held that to look straight over the gun-barrels in all sorts of weather, to judge correctly, distance, speed of the flying quarry, and wind velocity; to be wise in the habits of beasts and birds, to be able, by a glance at the sun, to tell the time of day within five minutes; to be expert in the building of blinds and the use of decoys, were enough for any man. Nature was his book, and he studied it. He had three maxims handed down to him by his father, who died just after the last Indian raid, and these governed his life:

"When you've got money, he's a feller that hain't got money.

"Shootin' on Sunday makes bad luck on Monday.

"Pers'verunce an' feesh-ile on th' gun-locks 'll do a heap."

It was the last maxim which sustained him during his five years' chase—off and on—of the bird that he came to know as "Red Wing," and he was proud of the ending of this contest of wits.

Back of Corpus Christi the land rises and rolls away to the northward in a

prairie covered by rich grasses. Between the rolls are hollows or swales, in many of which there are ponds of fresh water, averaging a mile in length by a half-mile across. They are not generally more than waist-deep in the center, and are grown up thickly with senna weeds. Senna weeds are tall and slender and bear long, slim, bean-like pods, which rattle in ghostly fashion in the winds of winter nights. Each of the pods contains several round, jet-black, shiny seeds, and of these seeds wild fowl are fond.

The ducks roost upon the gulf, but they feed in the senna ponds all day, flying from one to another in clouds. So thick are they that if a camera were focussed on a pond and the ducks flushed, the negative would show a solid black wall of them. When they are scared by the down-swooping of a hawk, the thunder of their wings may sometimes be heard two miles away, and a man, crouched at one end of a pond, though the day be clear, will be shaded by the mass of birds streaming two hundred yards above him as completely as if he held an umbrella. With the sun flashing upon heads and wings, the tens of thousands of them show every hue of the jewels of the mines, yellow and pink and bronze and carmine, white and brown and gray and purple—"blue, glossy green and velvet black," like the snakes of the Ancient Mariner. It is gorgeous.

Here and there are groves of live-oaks, sometimes covering acres, and often circular in form. They are called "mottes," and, viewed from a distance, are not unlike islands of darker green, rising from the sea of grass around them. Mustang motte stands fifteen miles northeast of Corpus Christi, and near it is one of the larger senna ponds.

On an early day in November, Briggs was making his way on horseback to this pond. When he reached it he staked out the horse with a rope fifty feet long, and walked to the edge of the pond, where he hid himself in the weeds which grew up to the shore. A gadwell buzzed past,

which he shot. Wading out, he picked up the duck and went back to his hiding-place. There he sharpened a dark stick, three feet long. One end he stuck into the mud twenty yards from the bank. He pressed it down until only two inches of it protruded. On this end he hung the gadwell by inserting the point in its throat, just under the head. The duck floated, with its bill slightly raised, as if it were alive and swallowing a tasty morsel. This was his decoy. In an hour a half-dozen ducks of various kinds were set out and they made a flock.

The afternoon had grown old and there was a cessation in the flight. Briggs decided to permit himself a pipe. Suddenly he heard a splash, and, peering cautiously, saw something which kept him thinking for a long time. A hundred yards away, in a lake-like expanse of the water, sat a mallard drake of great size. The nearly level rays of the declining sun beamed on him ruddily, and every feather of him shone like the facet of a gem. Briggs marked the lustrous emerald of his massive head, the reddish bronze of his neck, the pearly gray of his breast. He was instinct with life and vigor, a beautiful, powerful wild thing, as noble a masterpiece as ever came from Nature's incessant workshop. Glorifying in his strength and loveliness, he swam in small, rapid circles, or floated idly, gazing down at his own reflection and pleased with himself to the last degree. He preened his feathers until each lay as smoothly as if ironed, dived boldly and reappeared twenty yards away, merely to show that he could do it, spurted for fifty feet at lightning speed, checked suddenly, whirled as if upon a pivot, then threw his bill high and uttered a hoarse, strident challenge, that boomed upon the mild air like the bellow of some huge horn.

The man, his pipe forgotten, crouched until the ooze came up to his waistband. Then, as he looked and longed, the bird threw half of his body out of water, spread his wings upwards to their full reach and revolved slowly. The sunlight rested upon the pinions, and Briggs, to his wonder, saw that in each wing were brilliant crimson feathers. They were not more than four or five in number, but

were of the largest, and deeply hued. He knew that the fowl was a freak, of course, just as there are birds that are albinos, but he believed that it was the only one of its kind in the world. He wished to possess it, as a collector of coins will wish to possess an ugly circular bit of copper, not half so attractive as a new nickel.

He raised his chin slightly and emitted a soft noise, much similar to the sound made by a man when clucking to a lazy horse. This is the note of mallards when swallowing acorns. It was his deadliest call. In response the great drake became motionless and listened intently. The fowler waited a full minute, then repeated the cluck. The mallard, his crimson pinions flashing like the wings of the cardinal, sprang twenty feet in air and was away like a shot, dropping a squawk of derision as he went. Briggs rose, stretching his cramped limbs. Then he said:

"Sure, he ain't no this year's bird. He's smart. That swaller call oughter got him. I never done it better. Howsomever, pers'verunce and feesh-ile on th' gun-locks 'll do a heap."

He stayed at Mustang motte three days, but he did not see the red-winged mallard again. When he returned to Corpus Christi he sold his ducks, and before the wood-fire in Nie Constantin's smoking-room told the story of the red-wing.

Lige Hawkins, skipper of the schooner *Oriole*, felt his pulse and asked him to put out his tongue; Andy Faulkner, a surveyor who never surveyed, said that he was "daffy," and "Doc" Payne, who had had two patients in three years, prescribed boneset tea and castor oil.

Standing at Chiltapin dam in the first part of the following October, engaged in killing teal, he noted a solitary flyer moving quietly but fast out of the north, the long neck stretched forwards and the wings sharply elbowed. Something in its size or poise sent a reminiscent thrill, and he stood with rapt gaze. Soon, with a steady rush, each pulsation of the smitten air distinctly audible, the bird passed over him and the crimson feathers shone like a tongue of flame in each broad wing.

The man set himself to guard the pond at Mustang motte. He waited and



"AWAY LIKE A SHOT, DROPPING A SQUAWK OF DERISION AS HE WENT."

watched with admirable patience and skill through the cold months. Thrice he was rewarded by a sight of the quarry, and always alone. Once the drake passed above him, not more than fifty yards up. Making allowance for speed and trusting to a stray pellet to do the work, he pitched up his 10-gauge and pulled the hindward trigger. A red feather floated downwards. Briggs took it to Corpus Christi and showed it to the hotel doubters.

The two next years were depressing to him. In 1898, however, he met a Mexican who had been shooting over the salt marshes which lie to the north of Brownsville, and he had seen a large mallard with crimson pinions. He said, too, that the bird was with a hen of lighter gray than is common to the females. He supposed that she was of the summer's breeding. Briggs wrote to several acquaintances living near to the mouth of the Rio Grande. He heard from only one of them. This man wanted to know where he got his opium.

Being determined to shake off what he called his "hoodoo," he got together a supply of provisions, mounted his "grulla" pony and went into the field early in September, 1899. Only blue-winged teal had reached the Gulf country at that season.

He worked on, without putting much heart into it, until one day in December, when, walking along the edge of Rincon marsh and hoping to pick up a jacksnipe or two, he saw a brace of ducks pitch near the center of an arm of the sea, miscalled "Swan Lake." They were three hundred yards from him, but he could discern that they were mallards, that they were male and female, and as they descended he caught a gleam of fiery red in the wings of one which set his temples hammering.

Here was his old opponent in the game of venery, this time bringing his wife with him. The gloss upon his plumage said that he was in the best of health. The hen was shades lighter than she should have been—a duck that had barely missed being an albino. Indeed, as she swam on the greenish wavelets of the inlet in certain lights she seemed white. Intent only on discovering what portion of the country the birds affected after their daily bath

of salt water, Briggs discharged both barrels in the air. They rose instantly, spiraled high and shot away northwest by west, headed straight for Mustang motte, twelve miles distant. That night the market-hunter broke camp and when morning dawned he was in his old place.

Then began a campaign of two weeks. It was prosecuted with all of the skill, patience, watchfulness and woodcraft which his twenty years in the field had taught him. It seemed to him that "Red Wing" had more than human intelligence. He practised every lure within his large knowledge. He gave the assembly note. He gave the feeding note. He gave the fighting challenge. He gave the love call. He gave the low, deep recitation which means: "I have found a wonderful new kind of food in great plenty. Come and have a lot of it." He used decoys of painted wood, silhouette decoys made of tin, dead mallard decoys. He even rode to Corpus Christi and returned with a couple of tame Muscovies. These he set out with strings hitched to their legs, and they quacked merrily. Other mallards came to them in plenty, but "Red Wing" and his mate kept aloof. They were at the Mustang pond for hours each day, but the drake did not swim within a hundred yards of the man, though he devised a fresh blind in a new part of the water each night and occupied it at daybreak.

He noticed a temerity on the part of the hen. She was less intelligent or less cautious than her companion. Several times he could have killed her with a long shot, but he cared nothing about her. When she showed a disposition to approach him closely she was brought back by a muttered warning from her spouse, who had eyes, as the hunter said, "in his head, in his tail, in both wings, and in his flippers." Finally, determined, it seemed, to make his days as miserable as possible, the pair forsook the pond at large and confined their visits to a part of it which, for two hundred yards in every direction, was bare of weeds or cover of any kind.

Here, safe from harm, they floated and made love. So surely as Briggs drew near to the edge of the clear water, the male's deep voice sounded and they were away to the gulf for another plunge into

salt waves. They did not roost on the pond, and Briggs spent some time in endeavoring to find where they did roost, thinking that he might get near to them with a "fire-boat" in the black dark, but he failed. As distance is nothing at all to a mallard, he concluded that they went fifty miles down the coast-line before pitching upon some still, inland bay. They returned each morning at sunrise, getting their feed by diving to the bottom, which was thick with senna seeds.

Then he absented himself from the pond for several days, and did his shooting miles away. When he returned he bore, besides his game, a large bundle of senna weeds. He amassed a pile of them. The fourth day he spent in considering the making of his armor of deception. On the fifth day he went to Corpus Christi, bought a cheap shotgun and had the barrels cut to a foot in length, so that it could be used easily with one hand. On the sixth day he went back to camp, feeling composed and hopeful. The seventh day was Sunday, and, in obedience to the maxim of his father, he loafed heartily. The remainder of the time he put in binding the senna weeds about an iron barrel-hoop, just big enough to go over his head and rest firmly on his shoulders. When he had finished he had a most natural clump of stalks, massy enough to deceive any bird, no matter how super-duck its intellect might be. He tried on the thing, and, turning it round and round, found that there was one crevice through which he could see with his right eye. Then he went to sleep.

At daybreak he was at the edge of the pond's clear space, with all his body submerged. The shortened gun was held up among the weeds about his head. His teeth chattered, but he clenched them and waited. When the sun was two degrees above the horizon "Red Wing" and his wife pitched in the center of the open water. They swam about each other and eluded mutual congratulations on the day and the certainty of a good breakfast. The clump of senna, inch by inch, drifted out from the tangle of growth. So slowly it moved that it might have been driven by the gentlest and most fitful of breezes.

One thing troubled the man in the moving weeds: The hen was nearest him. She dashed gaily about, but always came back to her position between him and the drake, which was forty yards further away, the crimson pinions lying like smears of blood against his sides.

Not more than a hundred feet separated Briggs and the female, when "Red Wing," moved by a sudden impulse, no man can say what—a slight disarrangement of the disguise of weeds, something too swift in its advance, some recognition that it had no place in the clear space—threw back his emerald head, gave the danger note and launched himself afar. The hen followed instantly, upspringing with the activity of the dragon-fly, but she was too late. Jets of smoke leaped from the weed clump and she checked, a shapeless mass in air, then struck the water, dead, making a shower of spray.

Muttering volubly in anger, the hunter threw off his covering, waded to the body, grasped a limp wing and made his way to shore. The warm rays of the sun fell on him and took away something of the chill. He was stooping over the wife, noting the beauty of her pale plumage, when a rush of wings startled him. He glanced up. Not seventy-five yards distant the male was darting by. He went a half-mile down the wind, came back, circled out of gunshot and headed for the gulf. As he went he uttered a despairing call. Briggs whistled softly, put on dry clothing, boiled a pot of coffee, smoked a pipe and sprawled upon his blanket.

Next morning, just as the last few stars were paling in the west, he placed the dead bird as a decoy only twenty yards from the weeds which ringed the open space. At sunrise "Red Wing" came flying swiftly, not turning to the right or to the left, speeding as an arrow, seeking his lost love. Made desperate by loneliness, and all caution gone, he darted downwards and hovered for a moment above his consort. That instant the gun spoke and he dropped beside her, shot through head, throat, and heart.

Briggs told this tale before the wood fire in Nic Constantin's smoking-room, holding the body of the red-winged mallard in his hands. He felt hurt because the men did not praise him.

GAMBEL'S PARTRIDGE

THE ELUSIVE GAME BIRD OF ARIZONA

By T. S. Van Dyke

WHERE the mountains become so bare for lack of rain that their many minerals blend in the light of the sinking sun in all the tender tints of purple and rose, where soft grays and warm browns struggle from the barren slopes and dry washes to mingle their hues in that wondrous color harmony seen only on the desert, and where, even on the lower plains, only a few olive greens wander out to meet them, there, where one would think no life could thrive, Arizona and Sonora surprise us with a quail that, for intelligence, vivacity, and subtlety, has no rival in North America, if indeed in the world.

It is hard to imagine how a bird can thrive best where Apollo's bow is daily drawn to the tip with an arrow that stings as nowhere else, and should there develop in the highest degree the peculiar qualities that win the heart of those who love game which can get away. Yet, where the air is the dryest and the skies are so bright that the dry ground can not radiate in the short nights of summer enough heat to make the night comfortable, where water is so scarce that nearly all wild life finds it cheaper to go without, there Gambel's partridge, the common quail of Arizona and Sonora, is found in greatest abundance and with the highest development of his peculiar brightness.

Like the rest of the crested quails, he was born uneasy. In the vast expanse of shimmering heat, where one would suppose all life would need more rest than anywhere else, this one bird seems ever in motion. The vulture folds his wing on the sunlit crag; the hare, that runs the sun a race out of bed, seeks the shade of the artemisia for the day; though the raven still allows the sunshine to glisten on his sable coat, he sits around in silence for a time, and the doves that roam leagues of desert in the morning and evening travel leagues farther to spend

most of the day beneath some spreading mesquite.

If this quail ever rests by day it is a mistake, and even then foot, tongue, or head is still at work. It is not to be expected that such a bird will surrender easily to the gun, and he has studied its range until he has become the most difficult of all ground birds to secure by any fair means of hunting.

In the breeding season and while the bevvies are still young, Gambel's partridge shows little fear of man, though still retaining enough of his knowledge of distance to make him entertaining. He nests in the vineyard or alfalfa patch, or even in the garden, nods his jaunty plume from the rock along the road, or trots ahead of your horse at a pace few horses care to surpass.

With none of the elusive shyness of bob-white, he rather seems to court observation by running over open places, or scrambling over rocks and cactus from which he can get a good view of you, keeping up a running fire of remarks, many of which are addressed to you, while those addressed to his companions are just as plainly about you. Yet he loves quite as well the dry and rugged hills and the boulder washes of the cañons that seam their sides. No part of the land comes amiss to him if it is only hot enough, and has a little thin brush or cactus scattered over the blazing sand or among the flaming rocks.

About the time the sun begins to swing like a ball of fire into the eastern sky and turn the antelope into stilted ghosts glimmering forty feet high in the dancing haze of the mirage, the little quails leap from the shell into the fiery light as joyously as if leaving winter. Swift of leg from the start, they soon rise in soft curves of gray with timorous squeals, and even before the rosy bloom that tips the end of the whip cactus begins to fade, the covies unite in large bands. The bond thus formed is never broken

until the golden petals of the *pala verde* in the spring tell that mating time is again at hand. These bands unite again with other large bands and, descending from the hills to the lower grounds, often form great droves which, rising in a sheet of blue, make the hills echo beneath their roaring wings.

And now the bird that so often acted as if he would like to be your friend when the white of the primrose shone among the bunch-grass and the scarlet of the painted cup nodded to the blue of the iris on the damper grounds, shows a decided lack of that confidence. He takes the same apparent pains to let you know he is about, and keeps his ringing call sounding over hill and dale; but through it all is an undertone of caution. Here a flock runs a few yards, in perfect step, like an army, then a platoon wheels and splits off from the rest, then a second platoon rises and flies over, then all mass and dart off in another direction, with hundreds, and often thousands, of legs moving in as perfect concert as if connected by electric wires.

Yet all this time disappearance is under way. Here some steal under the shade of the mesquite, whose sinuous arms are ever hung with feathery green, then into the little gully over which the dragon's blood ever nods in brightest green, while others wind through the myriad needles of the prickly pear or still more forbidding *cholla* cactus, whose straggling arms seem to leave no way of escape from its dense array of sharpest spines.

Here and there with sharp buzz a curve of blue rises above the brush for an instant, but only as if for a better view of the intruder. For escape such action seems wholly superfluous. The nebulous haze into which the legs of the antelope suddenly melt when he concludes that evanescence is expedient is scarcely more striking than the filmy web that takes the place which the legs of this quail just occupied when he decides that his contempt for you may be a trifle overdone. And though you have seen legs of greater reach you have seen none that for combined reach and quickness can equal those of this quail.

Nearly all this time the game shows such an apparent disregard of real dan-

ger that a tyro is often lost in regrets that he did not bring more ammunition, and in wondering what he is to do with all the birds that he can not help bagging. Quite natural when one for the first time sees from a thousand to five thousand birds running in all sorts of evolutions only seventy yards or so away, and looking more as if they were rather curious to know what you have come for than in any anxiety about their own welfare.

Where there are quails in any considerable number it is little trouble to find them. A dog is rarely necessary to find the flock in the first instance, as in hunting bob-white. Indeed, unless specially trained on these birds he will be of little use; and his master needs special training almost as much as the dog. In the extremely dry air and hot sun a dog soon loses his power of scent in the excitement he is sure to have; and, unless kept cool, he is apt to be of little or no use just at the time when he could be of the most. If he is an old and steady dog from the East he is certain to be too slow for these swift runners, and if he is a runner himself he is certain to make sad havoc with your shooting unless he is a runner of the right kind. And this no dog can be until he knows by long experience the exact nature of the bird he has to find.

One need not worry about what the birds eat or where they get water. They appear to live largely on climate, like some of the inhabitants of the dry belts. It is certain that thousands never taste water from the cradle to the grave, unless it may be a few drops during summer showers. And many do not even get cactus or green stuff of any kind that is at all succulent, so far as any one can see. Yet those same birds are the most active of all, and no different in flavor from those that live about the alfalfa patches or by the ever-rolling waters of the mighty Colorado.

Sometimes the first intimation of their presence may be the *Bbbbbbbb* of a dozen or more rising a few inches above the brush and alighting again in a few yards. Or some of a flock may do this after you have been chasing them a while. Perhaps only one may rise and fly but a few feet. Or there may be a hundred or more with a still longer flight. In any case

they are not likely to be a quarter of the flock, but seem merely so many scouts rising to see the extent of the danger while the rest are making just as good time along the ground. But if all should rise together, it would make little difference in your prospects. At the distance the best you can generally do is to cripple one, and that is the last you see of it unless you have a fine retriever. And even if killed stone dead, unless it falls in plain sight, you lose so much time in finding it that the flock is farther off than ever by the time you are ready again. For they will be traveling faster than ever by this time. Where the saffron hues of the creosote bush light up its evergreen leaves they will be plying their nimble feet, and where the screw-pod and the cat-claw mesquite struggle for life among the glittering rocks, where even the Turk's-head cactus and the stonecrop languish in the streaming sunshine, they can beat you in the race unless you are well equipped for rapid travel. You must force them into flight and do so two or three times and often more before you will have shooting.

After you have thus flushed a flock two or three times and fired the gun into the air over them to scare them, without trying to hit any, you may be surprised to find one rise within a few yards or even a few feet of you. This may mean that the whole flock is now hiding, but it often looks as if they left a few stragglers in the rear to get shot while the rest plied their legs faster than ever. It seems, too, as if the victims selected for this sacrifice rather glory in their fate. Certain it is that when you have shot two or three in this way, and lost fifteen minutes in retrieving them and trying to start some more, the rest of the flock is often so far away that the whole hunt really begins anew.

But quite as often you are deceived the other way, the birds lying so very close that you think they have played this trick on you when they are really all about you. When they finally decide to hide well the shooting is often marvelous. As there is little ground cover, the birds hide mainly in the bushes near the

ground, where it is quite as impossible to see them as in the best of cover. From this they rise at all distances, many far out of shot, many at ten, twenty, thirty yards and over, but still in reach of a quick shot, many more lying until you almost tread on them, still others not moving at all because you do not tread on them. And after one has tramped and re-tramped the ground until one can not flush another, many are often remaining as closely hidden as any bird ever lies. Then a good dog that has been kept quiet and not allowed to become heated or excited can do some elegant work.

As they rise at all distances, so they do in all manner of styles. And they ring the changes on these so rapidly and at times in such bewildering sequence that they are the despair of the tyro, and for a few days often puzzle the practiced shot from the East. Marvelous is the style in which they can seduce you into futile shots and leave you standing with empty gun, while a dozen or more fine opportunities are vanishing in all directions. Here one dodges away at thirty yards in a short haze of blue that draws your fire, and keeps in sight just long enough to beguile you into trying the second barrel.

At the report of the gun one bursts from a bush at your feet, curls upwards in a spiral around your head, with wings of ashy blue fanning his rich chestnut sides. Another follows with the broad black patch on his lower breast turned full towards you, flanked by chestnut and cinnamon above his whitish underwings, and then wheels away with his plume of jet clear cut against the sky. Another follows, turning half over, so that you can plainly see the chestnut cap on his bluish head, and another curls so near that you may plainly mark the black forehead, the white lines that thread the rich, brown sides, and the dusky ones that slash the underclothes of white. Here one mounts the air with gentle pulsations of wing, as if in no haste, and there one starts off with the long dark plume bent backwards with speed. Or, instead of flying, the next one may burst from under your feet and dodge out of sight on the swiftest of legs

or run some distance and then break into flight.

And all this time you are loading your gun, and even with the most modern improvements find it all too slow. By the time it is ready again the last of the birds has vanished in the dense green of an ironwood, leaving you vowing that you will not again take a long shot when there are so many close ones. Yet the next one drops so quickly over a dense mat of green, over which he seemed going very deliberately, and another whips around a big mass of glowing rocks so adroitly before you can turn the gun upon him, that you forget your vow and empty both barrels again at one too far away, to be again entertained with a grand whirl of ashy blue and chestnut around you before you can reload the gun.

Though much of the acuteness of this quail is due to the persecution of late years, much of it is developed to a surprising degree where it is certain they have never been molested. A hundred miles below Yuma the sound of the gun is unknown to the great majority of quail that abound in the rich bottom lands of the Colorado River; the step of the white man is about as rare there as in any part of the continent, and the Indians never bother them. In the rich, moist soil the mesquite grows in a tangle of snaky limbs, beside which the head of Medusa was simple lines. Thirty feet high and often much broader, it forms a network through which little, if any, shot ever passes. And right well this trickster seems to know it. Here they run and run and run across the openings and around the huge tangles of green just out of shot, and the dodging facilities are now so great that it is harder to force the flock into flight. It splits and wheels and countermarches until all of a sudden you find it gone, perhaps without rising at all, though it may rise in several divisions, which go several ways. Yet it is often completely gone, and every throat of late so noisy now silent as the cloudless blue above. Yet there is hardly any ground cover to conceal a bird, but only scattered bunches of the waving mesquite sprawling here and there along the ground.

But what a cover it is! As you stand by its side and admire its feathery leaves drooping like ferns in the tenderest shades of green, covering like a cloudy veil the vast skeins of winding limbs, you little imagine that scores of birds may be sitting comfortably out of your sight within fifteen feet of you. And often you may thrash the outer limbs with the gun without anything stirring until about the time you have turned around to go away. Then there is a whizz and a buzz so exactly on the opposite side of the bush that by the time you turn round again there is just nothing to see. And if you had wheeled in time you would have seen only a few inches or so of gray haze, gone before you could raise the gun six inches. To increase your troubles, the bird is likely to swoop downwards out of the top, making what under almost any conditions is a hard shot. Should he make a slight mistake about getting the bulk of the tree in line, he rectifies it in a twinkling by wheeling into the right course about the time you are in hopes of laying out a tangent to his curve. And the way a bird can keep that course without coming into reach of the best gun is quite surprising.

Your education on Gambel's partridge is quite incomplete unless you have seen him perform in arrow-weed. This is a shrub with straight, tough stems, from seven to nine feet high, of which Indians make their arrows. It stands about as thick as corn sown broadcast for fodder, and, with its many leaves, makes almost a solid wall against the keenest vision. The bird knows the relative height of this and a man almost exactly. To get a shot at a partridge in it you must wait until the bird rises above it, and this is exactly what the slippery rascal is not in the habit of doing. To make him rise at all, you must be so near the edge of it that you cannot see over more than a yard or two of the top. Then the game will rise just high enough over it to be sure you are there, and dart away on a line parallel with its top. But quite as often it will assume you are there, and just skim the tips of the leaves where they gather in a floor of green.

But the great victory of this quail over the best shot and most eager hunter is in

thin mesquite—where it is so dry it can not grow large, yet so thick on the ground you can hardly walk without touching it, but still open enough to permit free walking. Too high to shoot over like the lower brush, yet destitute of enough ground cover, and lacking the great density of the heavier mesquite, it gives the birds little chance to hide. The consequence is that you have a stern chase, with little in sight save an occasional flash of bluish gray across a distant opening. This will be on the ground more often than in the air. But you need feel no scruples about shooting, for one scudding along the ground will make you wonder where your shooting education was completed; and when you see how much more quickly one can twist than when on the wing you will wonder why he takes wing at all.

When all else fails Gambel's partridge is apt to conquer even the expert by his ability to shed shot, for no bird of his size can stand so much killing and strug-

gle so quickly out of reach into cactus or rocks even with the last breath. At first he provokes you, but you soon learn to love him for his genius in devising so many ways of escape and putting them so quickly into such effective execution. You love him for his eccentricities and begin to love even the curious land he loves.

New feelings stir within you as the giant cactus rises on the landscape like a huge candelabra, the tall shaft of the *mescal* carries its golden plume into the sunlight, or the dark green trunks of the *petaya* stand massed among the purple rocks of Sonora. And you feel an affection for the fluted trunk of the great *zahuaro* cactus, for the bristling array of the *nopal*, and the straggling terrors of the *cholla* almost as strong as for the deep shade and olive green of the *chapuli* until you finally begin to feel at home when you see bare mountains struggle in blazing red and purple into the matchless blue of the land of dry air.

THE GOOSE IN MANITOBA

By George Baird

THERE was a time, not many years ago, when no other part of America could offer greater reward to the sportsman than Manitoba. Even yet there are many districts where game is abundant. Its prairies and bluffs, plains and valleys, streams and lakes are still the homes of more varieties of game than it is the good fortune of most Nimrods to become familiar with. By no means the least of these is the goose, which in its proper season claims and merits a large share of the sportsman's attention.

The varieties of geese most common in Manitoba are:

The Canada Goose (*Branta canadensis*), whose well-known "honk" is so welcome. It is the largest, most wary, and most difficult to bring down, and for these very reasons it is much sought after by sportsmen.

Brant (*Branta bernicla*), considerably smaller than the Canada goose, and easily recognized at a distance from other geese by its manner of flocking. Seemingly they have no leader or definite arrangement of the individual birds. Their weak-sounding cry is also characteristic.

White-front or Speckle-bill (*Anser albifrons*).—Not so common, but a very beautiful bird. Geese of this feather do not always follow the proverb and "flock together." Frequently they feed with other species.

Snow or Wavey (*Chen hyperborea*).—So called, not as is generally supposed, from the resemblance of a flight to the crest of a wave, but from the Indian word, *wawa* (snow), a flock seen at a distance on a rising incline having the appearance of a bank of snow.

A few pairs of each species may nest

in the less thickly settled parts of the province, but the majority remain only a short time in any one region during the spring. As they neither form regular flights nor settle upon definite feeding ranges, and the natural cover then afforded is poor, they are very wild. But in the autumn, when the year's hatch has more than trebled their numbers, it is well-nigh incredible how many thousands frequent the resorts.

The farmers regard them as enemies, and the government does not regard them as game. During no part of the season are they protected by law.

Many devices are resorted to to outwit the goose. The phrase, "Silly as a goose," may have had a basis in some region, but certainly not in the West, and he who would be successful in its capture must have studied goose nature with patience and persistence.

It was the custom among the early settlers to stalk it, protected by a pony, which grazed in ever-narrowing circles around a flock, until within range, when the broncho stepped ahead, leaving a clear shot.

A still more interesting device was to approach as close as possible on horseback, at a slow pace, from the lee side of the flock, then to rush at full speed directly towards the birds. As they were compelled to rise against the wind, all could not well escape before both barrels had been poured in at a fair range.

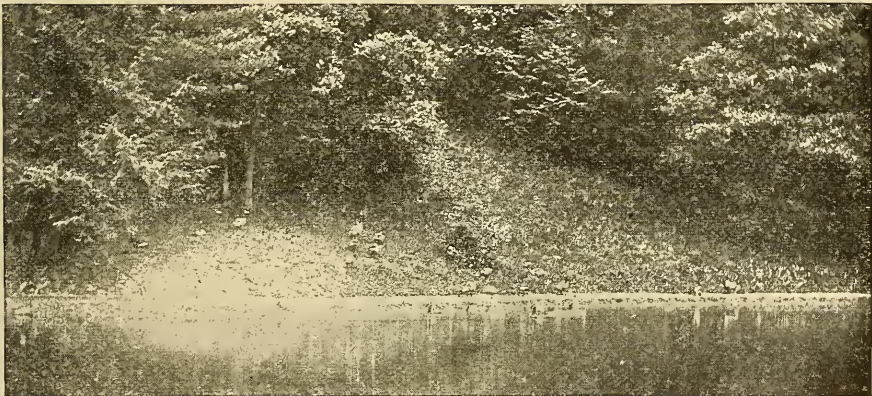
Land shooting as now carried on is generally accomplished by means of hides, decoys, and the various calls.

At the time of the autumnal migration the geese are not in a hurry to push forwards. They congregate in flocks, and locate in certain districts, where feeding grounds and watering places are chosen, and the birds fall into regular habits. Before attempting to locate your hide, it is best to observe the birds for a day or two, then choose a knoll in the locality of the feeding grounds; for there the flocks, as they come from the water, may be the more easily decoyed.

The kind of hide will depend entirely upon the nature of the surroundings. Generally it is a hole in the ground, three feet by seven feet, dug to a depth of two feet. The earth exposed, as also the hole itself, must be carefully screened by hay, straw, grass, or whatever is required to give the whole a natural appearance. In this too great care can not be taken, as a glint from the barrels, an upturned sod, or a protruding toe may spoil a morning's sport.

The decoys may be arranged in various positions with relation to the hide and each other. In case of profile decoys—the best for such shooting—care must be taken to have them so placed that some of them will present a side view to an approaching flock, no matter from which direction it may be coming.

It is of advantage to place among the painted decoys pieces of white cloth—small flags of cotton, one foot by one and a half feet, tacked along both ends to short stakes, answer very well. These will attract attention from a greater distance than the decoys, and even "Cana-



THE SOUTH SIDE OF THE LAKE.

das" do not appear to object to settle on the same feeding grounds with "waveys."

A skilful use of the call adds considerably to the prospect of rare sport, but be not too anxious to have the geese always do just what they are expected to, or you may be disappointed.

In case there are several shooting over the same decoys, always have the most experienced, or rather the coolest, use the call and give the signal to rise, for it requires no little self-control to allow the birds another circle when they come almost within range.

Some sportsmen prefer to build their hide and use the call while the geese are in the course of flight, near the watering place instead of at the feeding grounds.

Usually there are four flights a day. The first, the incoming flight, begins with daylight, and may continue for an hour or more. In this the birds rise slowly, so that within a distance of 200 yards from the water's edge a flock is seldom more than 50 yards from the ground. The return flight is about ten o'clock in the morning. It is usually high and often of short duration, the whole mass dipping their zigzag course to the center of the lake. There are few more attractive sights than to be on the south side of a lake and witness a flock of snow geese come in over the opposite bank a mile distant. The outgoing flight is about three o'clock in the afternoon, but then, too, there is a strong probability that the flock will be high, because it comes from the central portions of the lake. At evening comes the noisy return, when the air is alive with the sounds of flocks, the location of which can be estimated only approximately, for night already is casting her somber mantle over the landscape.

Who that has been privileged to sit by a lake and drink in the life of the hour can ever forget it! The "honk" and "cackle" of the incoming flocks, the response of confidence from those sporting in the waters, the "fluff, fluff," as mighty wings fanning the air overhead with measured beat, the scream of delight as the dip is begun, the roar of the swift descent, and the final "swish" and "splash," indicating a joyous arrival,

which is but the occasion for renewed and clamorous greetings. So intent is one upon the major sounds that he scarce is conscious of the deep, heavy quack of the mallard, the whistle of the darting teal, the piercing remonstrance of the killdeer, or the distant hoot of the owl.

From what has already been said regarding the different flights, it will readily be seen that early morning offers the greatest opportunities for sport. It is best to be comfortably seated in the hide before daybreak, because with the first faint rays of the sun the geese awaken, and soon a small flock will break away and others quickly follow.

Climatic conditions have a powerful influence upon the flights. A windy morning compels the geese to fly low, but the most favorable of all days for the sportsman is when the fog refuses to lift. Under such conditions the birds appear to lose all idea of direction and to become bewildered.

No sportsman will indulge in night shooting or use swivel guns or baited lines.

Regarding the size and style of gun there is, of course, much diversity, the supporters of the "ten" and the "twelve" being nearly equal. I have received satisfactory results with a twelve-gauge, using No. 3 shot in the right barrel and AA in the left. It is not necessary to shoot the leader of a flock, and even if you do succeed in bringing it down, it is frequently found to be a tough, old gander. For the same reason, when it comes to dividing the birds, be unselfish enough to allow the other fellow choose the largest in the bag. He will know better next time.

Regarding definite locations, it may be said that geese group mainly about the most desirable watering places. In the southern part of the province are White-water, Rock and Swan lakes; in the north and eastern portions are Lake Shoal, and the many smaller bodies at the head of Lake Manitoba, together with portions of the south end of Lake Winnipeg. All of these localities are much frequented by geese during the months of October and November, and they all are fairly easy of access by rail.



THE WINTER TREES

By James B. Carrington

IN patient, silent ranks they stand, a wall
Of purple shadow 'gainst the sky's dull gray,
Not dead, but only dreaming of the day,
That once again shall voice the sweet Spring's call.
Of Summer's murm'ring music rich. Not all
The bare brown limbs that sway can sound a note;
Nor yet are heard the sylvan choirs remote,
In tuneful joyance of old Winter's fall.

But even now, with swelling pride, that thrills
Along their slender twigs, the young buds stir,
Expectant of the deeper glow that fills
The East's cold dawns. And soon will soothe the whir
Of gentler winds, while every leaf distills
The richness that the dreary days defer.

GALLEON GOLD

By Frederic Reddale

MY name is Michael Fielding, at your service. By profession I am a mining engineer, educated at Columbia and at Heidelberg.

The late summer of eighteen hundred and ninety found me a physical wreck from overwork. The doctors prescribed absolute rest for at least six months, and advised a long sea voyage.

So it was that I went down to Front Street to see a friend in the shipping business, to whom I unfolded my tale.

"Got the very thing for you!" he exclaimed. "Our barkentine *Decatur* sails for Buenos Ayres in a week. The round trip will take about three months, and you'll have summer nearly all the time; you'll be the only passenger aft; captain and crew first rate, cabin grub ditto, and I guarantee you'll not regret it. What do you say?" I said "Yes."

Four days out we ran smack into a West Indian hurricane which, taking us in the Gulf Stream, bowled us into the heart of the "roaring forties." The *Decatur*, deeply laden with a stiff and heavy cargo, made bad weather of it from the beginning. Soon after midnight on the sixth day we were pooped and swept by a giant sea, and all three masts were ripped out of the ship.

Amid the crash of falling blocks and spars, I sprang from the cabin to the deck. Scarcely had I gained the hood of the companionway than I was knocked insensible by a blow on the head.

When next I opened my eyes it was in a strange interior, evidently a berth-cabin in a small vessel which, from the keen sense of motion and the incessant play of sunshine through the bull's-eye of the closed porthole, I judged was being driven rapidly through a lively sea; while a subdued hum and the vibration which thrilled through the gamut of creaks and surgings like a pedal bass, told me of steam and a swiftly whirling propeller.

Scarcely had I settled these facts in my still hazy and muddled intellect, and began to take a languid inventory of the

cabin, than the door opened, and there entered my old college friend, Tom Raeburn, whom I had not seen since our Heidelberg days.

He perceived that I knew him, and a kindly smile flashed over his features.

"It's all right, old man," said Raeburn, answering the unspoken questions in my eyes. "We picked you off a sinking and deserted derelict at daylight this morning. This is the steam yacht *Nina*, bound south on a cruise, and I'm boss. For the present all you've got to do is eat and sleep!"

I slept through the next twenty-four hours, and when I awoke felt so much stronger that I managed to rise and dress, and making my way through the saloon cabin I went on deck.

Raeburn was in a deck-chair under the lee of the cabin house, fondling the silky ears of a red Irish setter and blowing clouds from a great German student pipe, and a weather-beaten, mahogany-faced fellow, in blue flannels, gilt braid, and brass buttons, whom I judged to be the sailing master, paced to windward amidships. As he faced aft he spied me, and called Raeburn's attention to my presence.

My old chum sprang to his feet, half-dragged and half-supported me to his own chair, and at once introduced me to "Captain Bartholomew Bent, sailing master of the *Nina*."

Captain Bent acknowledged our introduction in shipshape fashion and added:

"That was a ticklish scrape o' yours, Mr. Fielding. When we came up astern of the old *Decatur* her decks was awash. How'd it happen?"

In a few words I let them have the yarn.

"All's well that ends well," said Raeburn cheerfully, when I had made an end, "and I don't know a soul in the world I would have sooner picked up than this same old Mike Fielding; he may be a godsend to us, Batty, if we have to dig for it; and we may. He's a mining engineer, you know."

This was all very mysterious, but just then the clatter of crockery and the smell of cookery brought to me the realization that I was desperately hungry. As if Raeburn divined my feelings he rose and led the way to the cabin, saying:

"Let's see if you have the appetite of a shipwrecked man, Fielding; then we'll talk."

I fell to too heartily, yet in the pauses of the service found time to look about me, and particularly to observe Raeburn more closely. Outwardly he had changed very little; there were the same rugged Scottish cast of features, the deep-set, restless eyes, the square chin, the high, speculative forehead. At Heidelberg he had been a follower of scientific fads and fancies, with a strong leaning towards occult metaphysics.

Dinner over, we went on deck. Seated under a short awning, with a box of cigars and the materials for cooling drinks at our elbows, Raeburn turned to me and inquired:

"Do you feel strong enough to stand a pretty stiff yarn?"

"Fire away!" was my laconic reply.

"Then here goes," he said, "but prepare to be astonished. . . . In the first place, we are bound round the Horn, into the heart of the Pacific—just where I can't tell you, because I don't know myself—on a hunt for buried treasure! Thought that would fetch you," he said grimly, as I straightened up in my chair with surprise.

"That's the case in a nutshell. Now for the story in detail, and—don't interrupt."

"As long as I can remember I have possessed a strange and vivid subjective mental picture. It seemed that somewhere, somehow, in the long ago, I was one of a band of lawless men, clad in clothes of an outlandish cut, and participating in wild and violent adventures. All this, however, is a blurred memory. One episode, nevertheless, is clearly projected. I was standing on an eminence in a lonely islet in the midst of a sapphire sea—I and another man. The island was like a cup, the rim, washed by a wall of surf, enclosing a lake—what is known as an atoll, or ring island, in fact. Not a soul was in sight save we two, but

in the distance a ship of strange build and rig rode at anchor outside the barrier reef.

"At our feet was a pit or shallow excavation, newly dug, and in the cavity were several iron-bound chests or boxes full of gold and jewels. Don't ask me how I knew that; the chests were closed, but I divined their contents. Of a sudden I felt a crashing shock, and pitched forwards heavily among the chests. There the memory ends. I see it now, as plainly as I see you before me. You've heard of such things?"

"Nearly everybody has had such dim recollections," I said. "Some call them memories of a previous existence; others doubtless have dreamt them, and subsequently thought them real."

"But it was no mere vision or dream on my part, Fielding. That thing really happened, *and I was there!*"

I looked at him fixedly, and his eyes met mine with a calm and cool steadfastness in which there was no hint of mental aberration.

"I say that I was there," he reiterated, as if in answer to my unspoken protest. "Naturally you ask how do I know it? I answer that in a former incarnation my *ego* must have inhabited the body of some poor sailor-man—a pirate or a buccaneer. I have reasoned it out, and I can come to no other conclusion. Now I am going to find the island and the treasure!"

If he had said he was going to the bank to cash a check he could not have been cooler or more matter-of-fact.

"Tis a strange tale, Raeburn," I said. Contradiction, I could see, would be hopeless. "But surely you must have some other ground to go upon than so flimsy and intangible a basis? Does Captain Bent know? And what about your crew?"

"Bent knows; the crew simply signed for the cruise. Here is how I piece the thing out," he went on. "My recollection—my dream, if you like—seems to point to the Pacific. I figure that the ship at anchor was a buccaneer, one of those English bulldogs who harried the western coast of America in the eighteenth century. The ruffian who stood beside me was her captain; the gold and jewels

which we buried were the plunder from one of the Spanish galleons or plate-ships which sailed regularly from Acapulco to Manila. The buccaneer chief took me ashore with him to bury the treasure, and then killed me so that none but he should know the precise location of the *cache*. Such deeds were done in those days by men like English and Teach."

"But the island, my dear fellow—how do you expect to find that? Is it named or charted?"

"It may be," said Raeburn, "but frankly I don't know. Neither Findlay nor Hoyt mentions it. The Admiralty charts do not give it. Here is a sketch and a map which I have drawn from memory, but although I have questioned scores of seamen who have sailed the seven seas, not one of them could give it a name."

So saying, he handed me a sheet of paper on which were pictured the salient features of an islet such as he had verbally described.

I drew a long breath. My astonishment was well-nigh too great for speech. Raeburn looked at me calmly and steadfastly, fondling the dog's ears the while.

"The Pacific is a wide ocean," I ventured. "There are thousands of islands between the Hawaiian group and, say, latitude thirty south. It strikes me that the traditional quest for a needle in a pottle of hay was, by comparison, an easy proposition."

"Not quite so bad as that," Raeburn made answer. "You see, we can bring the locality down to comparatively narrow limits. Those Jaek-Spaniards pursued a regular course, following the parallel of about twenty degrees north right across the ocean. They never bothered themselves hunting for a breeze; great-circle sailing was unknown in those days; if the wind came foul they just hove to; and they shortened sail at night as regularly as they said their prayers. My captain probably lay in wait for one of them right athwart her hawse, and after the capture, finding the loot too heavy or too precious for his own vessel, decided to land it at the first opportunity. So we shall cruise north of the

line somewhere between the parallels of ten and twenty-five degrees."

"For how long, Raeburn?"

"Don't know, I'm sure," was the nonchalant reply. "We shall find the spot we're looking for, never fear!"

"But, my dear fellow, with all the gratitude and friendship in the world, you can't expect me to keep on sailing forever and a day on a chase of this sort! Remember, I'm a poor man with his pile yet to make."

"Look here, Fielding," he rejoined, "if we find this galleon gold your fortune will be made, and you can let the mining-engineering business go to grass! You shall leave us at Rio if you insist, but let me tell you that I regard your happening along in the way you did as a very lucky thing for the expedition. We may have to do some pioneering or prospecting. I don't know and I can't remember how deep the pit was dug; then, too, there may have been some natural convulsion—an earthquake or a landslide—which will have changed the physical conditions somewhat. In short, Fielding, I have been thinking that we may need the assistance of a practical man like yourself, and if you can see your way to join me, I'll guarantee your expenses if we go back empty-handed; if we recover the treasure you shall share with me!"

"That's very handsomely spoken, Raeburn," I said; "give me until to-morrow to think it over."

"Right you are!" was the rejoinder. "Now come and see the ship."

Before I slept that night I decided to go to the end of this queer adventure.

We crossed the equator, ran down our latitude, called for coal at Rio, sighted the Falklands, and on Christmas Day the *Nina* entered the Pacific, heading northwards. A week of steaming brought us to Valparaiso, and two weeks later we left Callao, our bunkers full and the white deck heaped with coal in bags.

It was Captain Bent's intention to cut the equator at about longitude 120°, and thence to cruise leisurely on a course nearly due west along the parallel of 10° north, which would bring us into the thick of the islands.

For ten days we sighted nothing that

was not charted, but we were blessed with true Pacific weather. Then we made in succession Christmas Island, Palmyra, Barber Island, San Pedro, and Wake Island. Next we headed north-east for the Marshall Group. But nothing resembling Raeburn's atoll hove in sight.

One evening a wonderful thing occurred. The sun had just set in a cloudless sky when, right off our starboard bow, there appeared mirrored in the sky a most perfect mirage. There it hung, about midway between the horizon and the zenith, an inverted picture of an island, every feature showing distinctly, from the fringe of surf to its green-capped summit.

The crew were all on deck, it being the second dog-watch, gazing in awe-struck silence at the strange spectacle.

The mirage lasted only three or four minutes, but before it faded Captain Bent stepped to the binnacle and took the bearings by compass. Then, as the darkness shut down, and the crew scattered about the deck with loosened tongues, he came to where Raeburn and I were standing and whispered hoarsely:

"Did ye see it, Mr. Raeburn? 'Tis your island, sir, as I'm a living sinner!"

"Yes," said Raeburn quietly, "I saw it, and I was wondering whether you or Fielding would notice the resemblance."

He turned to me with a smile. "It *was* my island, Fielding, so that much is true!"

"Are you sure?" I queried. Although I clearly saw the picture in the sky, my eyes had not taken in all the details.

"Sure?" Raeburn echoed. "We'll show you the real thing in a few hours, and put you ashore there. How far off do you make it, captain?"

"Judgin' by the elevation, sir, som'ers betwixt seventy-five and a hunderd mile, maybe more. Shall I keep her away, sir?"

"Certainly," said Raeburn, "and put us alongside as soon as you can. Fielding here wants to be getting home."

I believe neither Raeburn nor Captain Bent slept a wink that night, while I contented myself towards morning with a doze on the cabin sofa. Breakfast was served on deck, for the *Nina* was under

full steam once more, and the atoll might heave in sight at any moment.

But it was nearly noon, and Bent was getting ready to take sights, when the lookout on the royal yard bawled:

"Land dead ahead!"

Whether it was the island remained to be seen. The charts showed no land within a hundred miles, but that was not surprising, for new rocks and islets are continually being discovered in that vast sea. A full hour elapsed before it could be made out from the bridge with the unaided eye, and it was eight bells—four o'clock—before we hove to about half a mile off shore, the dipsey lead showing no bottom.

All three of us eagerly scanned the outlines of the speck of land, for it was nothing more. Then the screw was started again, and we slowly skirted the shore, looking for a gap in the coral barrier, on which the surf pounded with sullen roar.

"You'll find the passage in the reef to the southward and westward," said Raeburn to Bent. The old skipper nodded, keeping his eye glued to his binocular as we slowly opened the land on the port beam.

The atoll could not have been more than three or four miles in circumference, for we steamed slowly around it in less than half an hour. What the interior might be like we could not tell, for its shape was that of a truncated cone, the shore rising regularly from the edge of the lagoon. But, sure enough, on the southwestern side we made out an inlet, no wider than the *Nina's* length, within which was the usual quiet lagoon.

"Shall you try to take her in?" queried Raeburn.

"Not to-night, sir," was Bent's rejoinder. "I'm afraid of horseheads. We'll lay off till morning, and send a boat to take soundings."

"You might start the fog-whistle, captain, and see if there's anybody in town," said Raeburn. So the scream of our siren woke the evening echoes again and again, but not a sign of life appeared, not so much as the flicker of a bird's wing. Even the sharks seemed shy of the spot.

All that night we lay off at the distance of about a mile, and kept the glare

of our electric searchlight trained on the land until it seemed as if it must penetrate every crevice and cranny. But when morning dawned the same unbroken silence and solitude reigned all around us.

Breakfast over—and a very early breakfast it was, you may be sure—the gig's crew was piped away, and Raeburn, Bent, and I dropped into her. The skipper steered, while Raeburn took a place in the bows to con the boat. Before leaving the *Nina* a pick, a shovel, and a crowbar were handed down. So it was

plain that Tom meant to land at once and put his theory to the test.

We steered straight for the inlet. There was not much swell, yet a wall of surf six or eight feet high pounded on the barrier reef, the huge combers rising and falling with the regularity of a pendulum. But inside the lagoon was as still as a pond. Looking over the side, I could see far down into the marvelously clear depths, the bottom being seemingly composed of white sand of extreme smoothness. There were no horseheads, those coral humps which rip the bottom



"I FANCY THIS IS THE FIRST TIME A MAN EVER GAZED ON HIS OWN SKELETON."

out of a ship as easy as splitting kindlings. Not a sign of shoaling appeared until we were a boat's length from the shore, and when our keel grated on the beach we found, not sand, but a soft, lava-like rock, not much harder than dried mud.

Raeburn leaped out and carried the painter ashore. I handed him the tools and followed with Captain Bent. The men were told to keep the boat off with the oars until our return, and we immediately set our faces inland.

On this side the cone seemed to have been broken away, and for about half of its height there was a deep gash in its side. The tropic sun and rain had everywhere veined and furrowed the surface, and in these numberless crevices a coarse grass grew very luxuriantly, and gave the islet its greenish appearance from the sea. Of trees, strange to say, there were none, not so much as a bush or the ever-present palm.

Raeburn at once began the ascent, keeping a little to the right of the gully. It was like walking along the bank of a dried-up mountain torrent. He never faltered or hesitated, going as straight as the rugged incline and the slippery grass would let him. After climbing in this way about a mile we came to the summit level, and this is what we saw:

The interior of the island was simply a cup, of which the place where we stood was part of the rim, the latter very nearly circular. Filling the cup half-full was a lake, placid and shadowless, mirroring the cloudless Pacific blue overhead. Raeburn's map was well-nigh as faithful to detail as a photograph!

But the desolation of it! Not a bird, not an insect, darted over its bosom, not a fin cut its polished surface.

"Evidently an extinct volcano," I remarked, "and yonder is where the lava last spouted into the sea," pointing to the gash in the rim of the cup.

Raeburn merely nodded. Captain Bent, using his glass, was slowly scanning the opposite rim of the cone, which was about half a mile across. Almost at our feet lay the *Nina*, heeling to the run of the swell, and looking like a boy's model yacht.

Slowly gazing around, Raeburn

seemed to be getting his bearings; he walked to and fro, on the narrow edge of the old crater. Here on the summit the porous lava was more loose and friable, and a few thrusts of the crowbar which I carried told me that the stuff would be not much harder to work than stiff clay.

While I was prodding aimlessly here and there, Raeburn wandered a hundred paces ahead to the northward. Suddenly he stopped and held up his hand. In silence we floundered to his side, and found him standing on the brink of a shallow, open excavation, from the edges of which there waved like a fringe some tufts of the coarse green grass.

It was a weird and gruesome sight that met our gaze. The trench was paved with stout boxes, about two feet square, the iron clamps on the corners and the heavy iron bands with which they were strapped showing red with rust against the bleached and weathered gray of the wood. There were twenty of these chests by actual count, five one way and four another, their tops fairly level.

But there was something else which chained our gaze and chilled our blood, even under the glorious warm sunshine and the blue dome of heaven.

There, stretched on its back, upon the iron-bound chests, with grinning jaws, and with arms outstretched in the form of a rude cross, the sightless eye-sockets looking stonily upwards, lay the whitened bones of a skeleton!

Here, then, was the verity behind Raeburn's strange freak of memory! Standing beside the open grave of the murdered seaman, with the gold of the galleon at our feet, and with Tom's narrative in mind, it was easy to picture the old-time tragedy in all its cruel and vivid ferocity.

In the presence of that grim and silent witness no denial was possible, neither did any congratulations over the successful outcome of our search seem suitable to the occasion. Just as the silence was becoming painfully oppressive it was broken by the chief actor:

"Well," said Raeburn, with a grim chuckle, "I fancy this is the first time that a man ever gazed upon his own skeleton!"

SPORTSMEN'S CLUBS OF THE MIDDLE WEST

By Leonidas Hubbard, Jr.

THE man of the Middle West is a creature of inherited instincts, derived from sires who left homes in the settled East to push westward over mountains, through forests, across lakes and down rivers to the wilds of the Western Reserve, where they cleared their land with an eye ever open for prowling foes and a rifle ever within reach; and where gun and dogs and traps supplied in winter the necessities which their stumpy little farms denied save in summer and autumn.

When the first frosts whiten the grass and "cook" the corn leaves these instincts possess the mind most fully. Then it was that the sire took down his traps and oiled their springs, for he knew the mink and musk-rat, otter, fox, and beaver would take on coats of "prime" fur. Then he laid in a new supply of powder and molded an abundance of round bullets for his small-caliber rifle, for the fox squirrel would betray his hiding-place by nuts let drop from the hickory's boughs; ducks and geese would be down from the northland, and the cold of winter would preserve such venison as he should gather in. It was a season of thrills with the sire, and a season of thrills it is with the son and the grandson. When the first chill days of autumn come they hear voices calling them away from the office and the town, towards—they know not what, save that it must be something wild and wooded.

The instincts are as irresistible as those of Tommy Atkins—

"If you've 'eard the East a-callin',
Why, you won't 'eed nothin' else."

Added to the force of instinct is that of tradition. A man recalls on this frosty morning the tale of a grandsire who, in gathering his supply of winter meat, shot a score of turkeys in a single day, and of a sire who in boyhood won renown as a trapper of wolves and a mighty slayer of deer.

He looks at the long, heavy "flint-lock" which a great-grandfather carried, and unconsciously wishes they would put silver front sights like that on modern hunting rifles. He turns to his own hammerless and fondles it as though it were his child. The call of the "red gods" is upon him, and he must obey. Throughout the day he meets other men with the same burning desire as himself. They confide in each other; next they devise ways and means, and then they organize. Maybe the organization is a club to protect what game remains in the now settled country. Perhaps it has in view the building of a "lodge in some vast wilderness," where its members may go to worship at the "red gods'" shrine. Or its purpose may be merely to promote such sport as men may have over the traps or at the rifle range.

In a wild country shooting and fishing clubs are a luxury. In old and settled lands they are a sporting necessity. So it is that the sportsman's clubs vary in character throughout the Middle West, as everywhere else, according to the nature of the country where they are found. About the Great Lakes means of gratifying the inherited instincts for wild country and wild things is never far removed. But along the Ohio those who hear the mysterious voices are obliged to unite and fight for every bit of wild country and for the protection of every wild thing.

To no one does the call to the woods come more strongly than to the men of this very region. Cincinnati has ever been a center for sport-loving men. Beyond the river on which it lies are the farms of Kentucky, once forest-covered, game-abounding land, where the white settler and the Indian strove for mastery on the "dark and bloody ground." Once turkey and deer abounded; squirrels and birds were everywhere. In those days the waste of a charge of powder was looked upon as little less than a sin, and tra-

dition hath it that such an offence by a son meant a scourging with his own ramrod when the Puritan father took stock of ammunition and game.

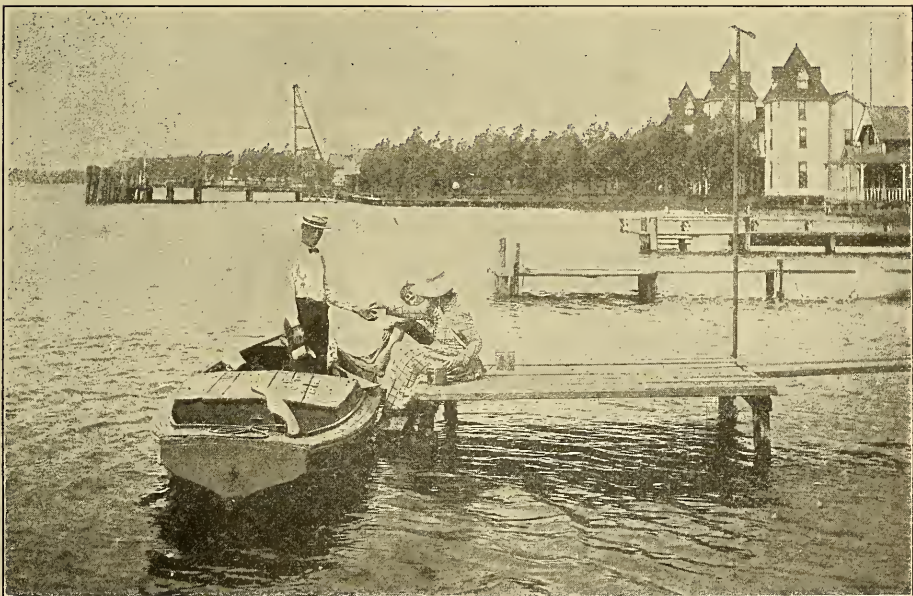
With the disappearance of the forest, years and years ago, the larger game of the region was lost. The deer have been gone many years, and it is said that scarcely a wild turkey remains alive to-day in a region where men once shot them in such numbers that they could afford to salt the breasts and throw away what remained.

This disappearance of the large game was followed by an unwillingness on the part of the farmer to permit hunting on his grounds, and the city sportsman found it well-nigh impossible to obtain shooting. The average farmer was not alive to the ethics of sportsmanship; he looked upon game as something made to slaughter and upon game laws as an infringement of his inalienable rights. He was killing the game and seining the rivers.

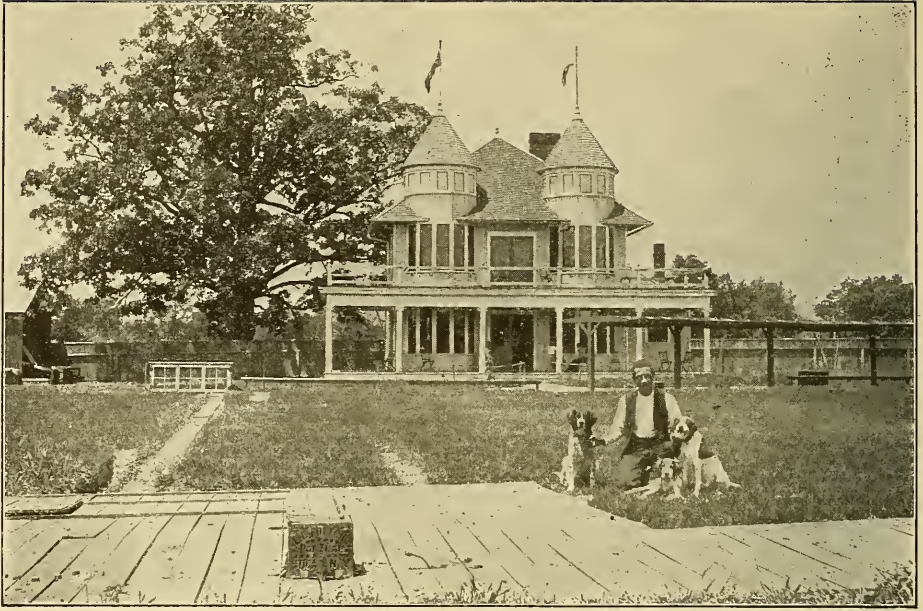
The recognition of these facts by Cincinnati sportsmen some thirty years ago led to the organization of the Ohio State Society for the Protection of Game and Fish. The society grew from the start, and soon decided to call itself the Cuvier Club, its present title.

The Cuvier Club has for more than twenty-five years been the chief influence for game preservation in the State of Ohio. Its struggle has been chiefly with the legislature. If anything in the world goes to show that the average State legislature is a fit representative of the masses for which it stands, it is its attitude towards sport and game preservation. Seldom or never is a State legislature in sympathy with the sportsman. This is because the sportsman is not of the masses. He stands for a higher ethical ideal. He stands above the masses as surely as did the knight of the middle ages. The knight fought his foe on equal terms. He fought him openly and honorably, disdaining any mean advantage. He was able to place abstract right above his own immediate gain.

So with the sportsman. He would no more shoot a deer in "yards" than the old knight would stab a foe in the back. He disdains spring duck shooting because the mating season has commenced, and the birds are flying northwards to bring back their young. He throws aside the "gang" of hooks as the knight would have dropped his lance on meeting an enemy armed only with a short sword. And it is not merely that he may



"THE MILKMAN'S VISIT." RUSHMERE CLUB, ST. CLAIR FLATS.



CINCINNATI GUN CLUB'S HOUSE.

have greater opportunity to slaughter at stated seasons; else he would not draw the line on too large kills of game, nor begin at a certain period of a day's fishing to return his trout to the water. Nor would he labor so hard for the protection of the song-bird, which he deems it murder to kill and which he loves as one of the beings that bring man near to nature.

But the mass of mankind, in the city as well as on the farm, is unable to appreciate either knighthood or sportsmanship. Hence we can hardly expect a representative legislature to understand why spring duck shooting is wrong nor why any method of taking fish is not allowable so long as it assures big catches.

The Cuvier Club waged its first war against the destruction of song-birds. It secured new laws and then fought for their enforcement. It labored for better game laws, and when it found that the officials empowered to enforce these statutes looked upon them as a sort of a droll attempt at humor, it sent its own agents throughout the State looking for illegal killers of game. Scores of hotel men were fined for having in possession game killed out of season. Seining was made

so dangerous and expensive that it was largely given up.

One statute remains, however, the *bête noir* of the Ohio sportsman; this is the law that permits spring duck shooting. The farmer influence in the legislature is responsible for this. The unsportsmanlike man who lives in the city has had little hand in it, for the reason that he does not care one way or the other. He is not on the ducking grounds in the spring, and is not affected. The farmer is ever alert, and ever within reach of the migrating flocks.

Now while the Cuvier Club has done much to protect game, the farmer is practically the only man who dares to shoot it. So well has he used his influence with the legislature that a city sportsman can not go upon a bit of farm land with dog and gun unless he first secures written permission from the owner.

But a force cut off from its natural expression will find some other means of manifesting itself. "Ironquill" tells us the man most certain to develop into a hero is a first-class lover whose hopes have been shattered. So the sporting spirit along the Ohio, largely deprived of its natural means of expression, has

found an outlet in target shooting. It is not surprising, therefore, that the quantities of powder and lead expended over traps and on the rifle range are enormous, and that Cincinnati has produced some of the very best marksmen in the country. The Cincinnati Rifle Association is made up of the sort of men that distinguished that city's contribution of sharpshooters to the army, and has held the American championship for offhand shooting for several years.

Its captain, Mr. Mathias Grindele, himself an ex-champion of North America, has been fighting for strictly offhand shooting among American riflemen. Last year in the Western League meet he and one other contestant only shot offhand. Captain Grindele saw that he must change his tactics, and now with his fellow club-men is reluctantly practising the "hip rest." This association originated in 1881, and Captain Grindele tells me that it has not once missed its bi-weekly shoot.

The trap shooters are not less enthusiastic than their brethren of the rifle. The Cincinnati Gun Club Company, organized three years ago, placed trap-shooting upon a firm basis. The plan of

the club was to secure as large a membership as possible. The number has now reached 250. The dues are low. The club is as a result democratic in the extreme, and has a membership ranging in character from office clerk to mayor, and from mechanic to millionaire. The sale of its stock enabled the club to lease grounds and build a house. A manager gives his whole time to the care of these grounds, and thither the members may repair on any day of the week to shoot live or clay birds. The average number of targets used per month is 1500 live pigeons and from 15,000 to 20,000 birds of clay.

The fact that impressed me most strongly when watching a practice shoot on the grounds of the club was the surprising amount of enjoyment which the members drew from their sport. Every detail of the shooting was discussed, and every difficult shot treasured as a man treasures the memory of a double on partridges in the brush, or an extra long-range shot at a running deer.

The fishing done by members of the Cincinnati sporting clubs has about it an atmosphere of thoroughness exceeding that of the fishermen among the



A PUNTER'S COTTAGE, ST. CLAIR FLATS.

lakes and streams of Michigan, where I lived several years. It is the thoroughness of the man who has but a small field, and is consumed with such eagerness for his labor that he works that field to the utmost. The Ohio fisherman has not roamed from pond to lake and from lake to stream, as has his Michigan brother, who knows more or less about a whole county, or maybe two or three counties, and can tell you the general characteristics of a dozen or more



INSPECTING THE CATCH
AT THE MERVUR CLUB, ST. CLAIR FLATS.

streams, lakes, and ponds. When you hear the Ohio man talk you realize that what he of the North said was only general, whereas the fisherman from Cincinnati or thereabouts knows his one stream in the minutest detail, and he knows the fish, too. He exhibits a patience in angling for some large bass which, he tells you, lives in the eddy below a certain riffle that his more bountifully supplied contemporary would not think of. As the fish become wary he becomes more careful and devises new baits.

The more plentiful supply of game in Michigan may account for the fact that that State has no organization with the standing of the Cuvier Club as a fighter or legislative battles. Such fighting has been done, but it has not been so well organized. There was founded during the past autumn a society which looks forward to such a career. It is known as the Detroit Dog and Game Protective Association, and was organized by Mr.

James B. McKay, president of the Board of Estimates of that city. Mr. McKay has made a study of the game preserves of Great Britain, and of the methods employed there for breeding and introducing foreign birds. The Association hopes to bring about the introduction of some foreign species of pheasants into Michigan. It is now preparing an attack on the statute that permits spring duck shooting.

This spring duck shooting law was proposed and advocated in the legislature two years ago by Senator John Leidlein, of Saginaw, a farmer of German extraction, who calls himself a sportsman. The opponents united their efforts in urging Governor Pingree to use his veto power. The governor confessed to his petitioners that the unsportsmanlike element in the legislature was too strong for him; so he signed the bill, and the pot-hunting legislators spent the succeeding night in a revel of joy.

The chief shooting clubs of the Peninsula State are found along the western end of Lake Erie, and on the shores of Lake St. Clair. South of Detroit, on the Detroit River and Lake Erie, with Monroe as a center, are marshes of wild rice. Above the same city is Lake St. Clair. Flowing into this from the north is the St. Clair River, the outlet of the three great lakes above. Sediment brought down on the current has, during the course of ages, filled the upper part of this lake, making it very shallow. Several channels break through the delta and wind their way to the deeper water below. Between these channels is marshland, grown up to rushes and wild rice. Here were ducks in abundance from the earliest times. Cadillac, the founder of Detroit, said, in 1701, that ducks covered the water so that they "drew up in lines to let boats pass through."

Twenty-eight years ago three men landed from a little steamer at the building where lived the superintendent of the ship canal which the government had been obliged to cut through the shallow water at the lake's head. They hired the superintendent's son to row them to a point a few rods north of the opening of the canal, and there, on the bank of the channel, in water some six feet deep,

they drove four stakes. Then followed a barge with a pile-driver that drove great timbers into the bottom of the lake, and carpenters who built on the tops of these timbers a small frame house.

This was the beginning of the Lake St. Clair Fishing and Shooting Club. At that time it was nine miles from the nearest land. There the members came to hunt and fish. There, with cool, clear water on every side, with game-filled marshes in their rear and abundant supplies of bass, pickerel, mascalonge and perch in the channels, they found rest and sport after the hot summer months of the city.

The marshes had islands in them, and on these lived the old French settlers, famed far and wide for their musk-rat dinners. These were employed as "punters," and with one of them to paddle his boat the sportsman would push through the marsh, shooting such ducks as he frightened from the rushes, or would lie hidden to catch the morning and evening flight.

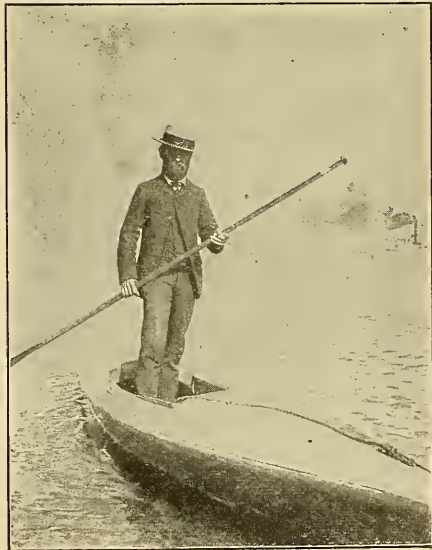
As days went by the club grew in membership until the original building was too small and a larger one was erected. Other clubs sought the same grounds. More houses were built on piles rising out of the water. Then dredges were brought, and earth thrown up from the bottom and protected by sheet piling to form "made" land. The club members built cottages above and below their club houses. Then private parties, not club members, began to take the hint and build on the "flats." To-day, mile after mile of cottages stretch away along the channel, and what was once exclusively a shooting and fishing ground has become a mighty summer resort, a resort reached only by boat; where the "punter" takes the place of the guide; where the launch supplants the coach and trolley-car, and where the milkman makes his visit in cat-boat or launch.

During these changes the clubs have lost to a greater or less extent their character as sporting organizations, and have taken on more of a social complexion. The duck shooting is still good, though the praisers of bygone days tell us that it is nothing to what it once was. This is accounted for in various ways, all of

which may be summed up and labeled "inadequate protection." One man who has watched the "flats" since the days when not a single cottage had been built tells me that the destruction of the eggs of such ducks as breed here has had much to do with it, for summer resorters vie with each other in seeing who can secure the largest collection of duck eggs. There is a law against the robbing of nests, but the law is not enforced to any extent.

Then, too, the lining of the channel with cottages, whose owners keep up a continual firing at the flying birds, has led to the destruction of thousands upon thousands, while others have learned to shun the American side. The same astute legislation which provided for spring shooting fixed the opening of the duck season at September first, thus permitting the bombardment to open before the summer resorters have gone.

All this has tended to drive the sportsman from his old hunting grounds, as the red man was driven before him. A number of Detroit's old-timers have sought the wilds of Northern Michigan, where they are preserving the almost useless pine "slashings," which, grown up to underbrush, popple and "jack pine," form barren wastes, where deer thrive and par-



A DUCK-BOAT, ST. CLAIR FLATS.

tridges abound. The pioneer among these is the Turtle Lake Club.

Still others have allied themselves with the Canadian organizations. And right here is an object-lesson for American sportsmen and legislators. Let him who would learn thereby visit the "flats," as I did one day about the first of October. Let him secure a punter and push about the marsh on the American side. Then let him turn to the Canadian shore and prowl through the marsh there. He will be surprised to find how many ducks there are on the Canadian side, and how few on the American.

The reason is very plain. On the Canadian side, shooting does not begin until October 15. On the American side it opens six weeks earlier. Cottagers had been bombarding every stray duck on the western side of the channel for a month, while in the eastern marsh not a shot had been fired.

This Canadian law is not merely a statute. Provision has been made for its enforcement. Tales are numerous along the American shore which illustrate the healthy respect of the Michigan pot-hunter for the Canadian wardens.

Many Michigan men have, therefore, entered Canadian shooting clubs, gladly paying the \$25 required for a hunting license for the sake of the better shooting. Representative among these organizations is the Toronto Shooting Club, which has leased the right to hunt on the Indian reservation, including Walpole Island and a large amount of marsh on the Canadian side of Lake St. Clair. Its club-house, like those at the "flats," is built on "made" ground, an artificial island rising out of the marsh. The lease is for ninety-nine years, and since the grounds are thoroughly protected, there is unlimited game, and will be for generations to come.

There is a charm about this marsh. I push out into the Canadian rushes in a skiff. Everywhere are channels cut through the rush-covered swamp. I push my boat into the grass and am hidden from view. Before me is a star-shaped spot of open water, with rushes running out in pointed beds to make the angles of the star. Now a flock of ducks pass above me. They are birds that breed here,

The fall flight has not yet begun. Now a flock swims around one of those rushy points into range. But I have no gun, for the hunting season has not opened.

One feels as though there were nothing else in the world but marsh and water, and the low horizon line where rushes and sky seem to blend. But suddenly, off on the left, is the shriek of a steamer-whistle. Standing up in the skiff, I see a great white passenger vessel winding up the narrow channel through the marsh. She is one of the big ones that run from Cleveland to the Straits. Behind her, apparently just issuing from the mouth of the ship canal, is a big red freighter towing a fleet of whale-backs. All the ships that pass through that world's greatest chain of lakes, connecting the cities of the East and West, go by here. Yet as the steamers wind farther on their way the channel is entirely lost to view; the ships appear to be plowing through the marsh. It is a sight to suggest the Flying Dutchman.

Below the Toronto Club, on the Thames River, a number of Detroiters have preserved 1,200 acres of marsh-land and named the log house built thereon "Widgeon Lodge."

The best duck shooting on the Michigan side is without doubt on these Monroe marshes along Lake Erie. There sportsmen have taken time by the forelock, and prevented the possibility of anything in the way of a popular occupation of the territory by preserving the marsh. Here is the Monroe Shooting and Fishing Club, composed mainly of wealthy Detroit men, who enjoy unsurpassed duck shooting.

Near by is the Point Moullie Club, accounted the most aristocratic sporting organization in the State. Originally it was composed of Michigan men. But shares became valuable and Eastern capitalists tempted the men of the lakes to sell their stock, and now only one man in the State retains his membership.

Here, too, are the old French "punters," and the method of shooting is essentially the same as at the "flats." Ducks are fully as numerous as they are on the Canadian side, for the club members are sportsmen, and refuse alike the early autumn shooting and that of spring.

ARMY AND NAVY FOOTBALL

THE TRUE SPIRIT OF PLAY

By Harmon S. Graves

FOOTBALL is unquestionably the representative American college game. It has been wholly developed by college men, and they have naturally furnished its highest exponents. It is so widespread that practically every college and preparatory school in the country sends out a regularly organized team, and every institution which harbors an eleven takes pride in the men who compose it. The manly qualities which are necessary to the building up of a successful player call forth the best class of college men, and the wholesome attributes which the game itself promotes are shown in the splendid examples of mental and physical manhood to be found among football men. This is true only if the game is played in the proper spirit; how great, then, should be the solicitude lest the game lose aught of its standing? It is doubtless true that college men as a whole seek to keep the game

in its present high position, yet oftentimes effort is sadly misdirected. It is a serious and pertinent question, even with all that is being done, whether or not college men are really preserving to the utmost the true spirit in football, without which football must retrograde.

The greatest drawback to the wholesome conduct of the game is lack of the amateur spirit in players and managers. Good material and advantageous surroundings will not bring out the best results unless a true spirit of sport is the foundation. This spirit has been variously defined, and most teams pretend to accept its guidance, but too often it is mere pretense, and the quality of the playing and the character of the players deteriorates. The true spirit in football is absolute integrity and fairness in players and playing, and the dash and determination which can be built on that basis. As to players, it means strict ob-



* 1. Fowler, Capt., l. $\frac{1}{2}$ b. 2. Adams, r.t. 3. Whitlock, c. 4. Long, $\frac{1}{4}$ b. 5. Read, l.end 6. Nichols, r.end
7. Smith, f.b. 8. Williams, l.t. 9. Belknap, r.g. 10. Fremont, l.g. 11. Manley, sub.f.b. 12. Laud, r. $\frac{1}{2}$ b.

ANNAPOLIS FOOTBALL SQUAD, 1900.

servance of the spirit as well as the letter of the amateur rules and rules of eligibility. As to playing, it means absolute fairness in the plays used and the way they are put into execution; and as to dash and determination, it means head-work combined with wholesome, fearless effort which pushes aside all obstacles and so-called hard luck. Such is the spirit on fields where the rules of the amateur are lived up to and the game is played for the sport's sake. This is what football must mean to keep its place as the greatest of college sports.

Examples of the bad effects of a perverted spirit have been numerous. One team spends most of its time worrying as to whether a certain man will be allowed to play, when it is patent that he is ineligible; while another bemoans its hard luck because a player is behind in his studies, or because some other perfectly justifiable restriction is placed on the men or their time for practice. All such complaints and the stretching of rules to cover certain cases are born of the wrong spirit and harmfully affect the game.

West Point and Annapolis are the best exponents of what true football spirit can accomplish. To them are due the thanks of all friends of college sport, for they have furnished an excellent example for the colleges. There is no discussion, no finching at either academy, and the quality of football is the best, even though it is produced under restrictions and difficulties far more serious than any encountered at a college. It is the spirit with which the cadets play that enables them to surmount obstacles, and place teams on the field which are an honor to their institution and worthy opponents for any team.

Cadets come from every State, and, as a rule, especially at Annapolis, are younger than college men. They have generally prepared at high schools, where football is played very little if at all, and therefore start with more need for practice and careful personal coaching than any college squad. At West Point the cadets return from camp to barracks on September 1, and within the following week the call for football candidates is made. Throughout September and October (during October a game is played

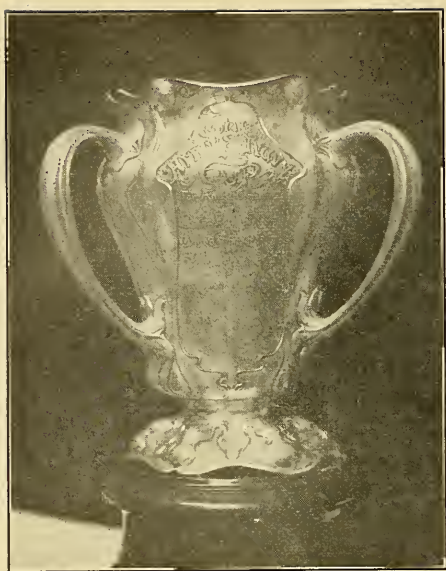
with a visiting team every Saturday and occasionally on Wednesday) the hours, or rather the minutes, the squad can gather for practice are a short half hour before *reveille* (and *reveille* is at six o'clock A.M.); for twenty minutes before two, directly after dinner, and between half-past six and seven, after supper, which can only be utilized for going through signals in the gymnasium. The four Saturday afternoons in September are the only opportunities for practice in football clothes before the first game is played. During October Wednesday afternoons, from twenty minutes after four until dark are available, but this time is never more than an hour, and as the season advances less. Beginning with November, until the end of the season, the team can practise each day after half-past four, and this gives the first chance for anything like consecutive practice, even though the actual playing time is cut down to a few minutes, as it grows dark about five o'clock.

At Annapolis the situation is similar, though the hours are slightly different. There the team practises from six to six forty in the evening, except on Wednesdays and Saturdays, on a field dimly lighted by six arc lamps; if the ball is kicked higher than these lights it disappears entirely from view. West Point in 1893 tried surrounding the entire field with similar lights, but the idea was abandoned because the chance for injury was largely increased, and inaccuracy in sight and movement was promoted.

At both academies these hours for football are all that can be had; it is simply out of the question for a cadet to be excused from any duty. The number of cadets at each institution is about four hundred, and it is often impossible to get men heavy enough for the line positions. They are obliged to keep regular hours, and are usually in good condition, but by the first of October any properly trained college team is in fully as good condition, and as the season advances the more constant practice gives college teams an advantage in this respect. Yet the teams representing West Point and Annapolis have played such quality of football as to always compare favorably with the big universities.



WELL TACKLED!



THE ARMY AND NAVY CADET FOOTBALL CUP.



ORIE FOWLER
CAPTAIN ANNAPOLIS TEAM, 1900.



WALTER D. SMITH,
CAPTAIN WEST POINT TEAM, 1899, 1900.

The team at each academy is under the supervision of an association of officers who control the policy, while the cadet managers deal with the visiting teams. Expenses of every nature are paid by the personal subscription of the officers and cadets; no admission is charged for any game, and it is absolutely impossible for a cadet not in good standing in all departments to play.

At the annual meeting of the Officers' Association a report of the past season is read; these reports are carefully pre-

pared and contain suggestions for the better conduct of affairs the year following. The whole matter is handled with a genuineness of spirit and care for details which furnish an object lesson for other institutions whose experience has been three times as great. The games are all played at West Point or Annapolis, except the one between the two academy teams, which at present is played at Philadelphia, such middle ground making it possible for the cadets of each institution to go and return the

same day. The result of this game is telegraphed to every army and navy station, including the Philippines. This annual game is the most illustrious and satisfactory athletic event of the year. Here is seen a genuine triumph for amateur sport, and a contest of perhaps the most widespread interest. Here is seen what the true spirit in football can accomplish. It is exhilarating to witness such a game, and every one feels a just pride in football and the men who are playing. The cheers are stirred by



Bunker Phillips Smith, W. D. (Capt.) Bettison
Boyers Lahm Goodspeed Casad Clark, F. W.
Farnsworth Laurson

WEST POINT FOOTBALL TEAM, 1900

pared and contain suggestions for the better conduct of affairs the year following. The whole matter is handled with a genuineness of spirit and care for details which furnish an object lesson for other institutions whose experience has been three times as great. The games are all played at West Point or Annapolis, except the one between the two academy teams, which at present is played at Philadelphia, such middle ground making it possible for the cadets of each institution to go and return the

the fair and exciting contest, but most of all by the splendid spirit of the men, which makes every play go hard and well, and the game an example of what football can be at its best.

The task of officials will be easier when such a spirit prevails among colleges. It must be highly gratifying to Army and Navy men to realize that West Point and Annapolis at this important period in football development have shown the way to the true spirit of sportsmanly play.

THE LEGEND OF LITTLE PANTHER

A TRADITION OF THE SENECA INDIANS

By Edward Kemeys

IN the old days, before the white men came, when the forests stopped only at the ocean, lake or plain; when all wild creatures thronged the woodland aisles or roamed the treeless prairies; when the waters teemed with fish, and the air was full and sweet with the rush of wings and songs of birds, there lived in the Seneca tribe of the Iroquois nation a warrior of great fame named Little Panther. He was mighty upon the warpath and as a hunter. In all that nation of braves his prowess stood unequaled. And in the tribe there existed for a long time a legend regarding his birth.

The old chief, his father, whose name was White Thunder, was a man of ability and a sage counsellor, but while ruling his people with determination and wisely, his voice was never for war.

In a tribe like the Senecas this disposition was almost unpardonable. The savage warriors clamored against their chief and longed for a ruler who would lead them against their enemies and along the red path; but the Senecas knew not what they desired; they only felt their savage instincts surging within them and the wild desire for blood grow uppermost in their hearts. Even the wife of the old chief became affected by the murmurs about her, and in her fierce nature uplifted her voice in supplication to the Great Spirit, and prayed that the Senecas might one day have a chief as savage as a panther.

In the beautiful early autumn when the pepperidge trees were just beginning to turn red in the swamps, when the few

leaves lodged in the brooks changed their clear tinkle to a low gurgle, which mingled with the first chirpings of crickets, Somewa, the old chief's wife, strayed off from the village, alone, to wander in the silent woods, perchance to offer up to the Great Spirit a prayer; for her heart was heavy and the presence of her people was irksome to her.

So, forth she went among the forest aisles and by the borders of clear lakes,



"ON A ROCKY PROJECTION CROUCHED A MONSTROUS PANTHER."

where the deer, startled by her approach, went plunging off from among the lily-pads where they had been feeding. All through the long day she traveled, unthinking, until at last she noticed by a long shadow across her path that the sun was slowly going down; she also became aware by the roughening of a small lake's surface that the wind was rising, its voice was making music high up among the towering pines, and as it circled downwards it swept a wave of her black hair across her face and sent a nameless shudder through her frame. She wrapped her robe closer and, looking about, turned her face homewards.

Through the trackless and sombre woods she passed, with the ever-increasing movement of the coming storm all around her. The great pines tossed their plumes as that harper, the wind, struck his chords among them and sent the wailing minor over all the land. On pressed Somewa, her mind filled with misgivings, for she had passed the day in wild and mysterious longings which raised within her breast a strange and weird sense of some evil to come, of

woman as she toiled beneath. Darker yet grew the sky as she sped along, following, as it were, some few dry leaves which kept whirling in her advance as if beckoning her onwards.

At length, born of the storm, a blaze of lightning fused a mountain top, then darting earthwards, fell just in front of Somewa with a blinding glare, and shivered a monster pine, whose fall was on the instant drowned by the pealing thunder. The woman paused, her Indian

instincts almost bewildered by the tumult which arose on all sides about her as the forest rocked and shouted in the wind and blinding rain. A vivid flash for a moment illumined the scene, and she saw a rocky wall near at hand, to which she ran; and feeling uncertainly along its side, found a cleft, into which she crawled, and crouching beneath an overhanging shelf, was protected from the storm.

Weary and overwrought with exertion and a haunting terror which possessed her, she yielded to nature and sunk into a deep sleep.

She dreamed, and in her dream saw into the recesses of the rocky cavern wherein she slept. She saw herself rise and go outwards, but the mouth of the cavity seemed to be guarded; and as she slowly strained her eyes into the shadow, for it had grown dark, they centered, fixed and distended, upon a form. On a rocky projection

which overhung the cave's mouth there crouched a monstrous panther, his limbs all gathered beneath him, his immense quarters trembling with eagerness as he slowly and almost imperceptibly at times lifted his cushioned fore feet. His great tail quivered and twitched with pent-up force, and on the yearning head and neck the cat-like ears slowly laid themselves down. Somewa was palsied with terror and rooted to the ground. She made no effort to move, but as her failing limbs almost sunk beneath her, heard ringing in her ears her oft-uttered prayer, "That her people should come



"SOMEWA."

which the impending storm seemed the dread forerunner.

The surface of the earth was as yet dry, and there lingered among the trees at intervals some belated, slanting rays of sunshine, but these, too, were soon absorbed by the oncoming twilight which slowly enwrapped the forest in its darkening pall. The distant summits of the hills were gone from sight, and naught remained but the unending ranks of the trees which seemed, now that they were moved by the wind, to be endowed with supernatural life, and to hang threateningly above the hurrying

to have a chief likened in savagery to a panther." Then as she gazed, o'ercome with terror, she felt a creeping thrill. At this her pent-up agony found voice in a piercing scream—she started upwards, awake and staring.

The thunder was dying off among the distant hills, and through a gap there streamed in one last red arrow of sunlight. It centered on the ledge seen in her dream, but only illumined the soft, gray moss of its surface till it shone wet and sodden like a clot of blood.

* * *

Autumn had turned into winter, and winter yielded to balmy spring when the Indian village was noisy with games and laughter. A festival was being held, for a son was born to the old chief, White Thunder. But apart from the moving scene, in a maple grove, stood the chief's lodge, and within its darkest corner lay Somewa, from time to time casting half-terrified glances at the outside light as she soothed a faint, wailing cry. So she guarded her child, keeping him screened from all eyes, even from his father's; but a time came when as the infant grew stronger all knew his eyes might bear the light, and at last Somewa said to her husband, "Come now and see him."

Then as the red chief looked, she saw a dark frown gather upon his face; the corners of his stern lips twitched as he muttered, "He will lead my people to their death when I am gone. You have had your wish, Somewa. He looks like a little panther."

And so it befell the

child was named Little Panther; and ere he came to man's years he earned his name, for naught was too terrible in his lust for blood. He led the Senecas on the warpath against their enemies; he fomented discontent and violence in every form, and when his people, tired with slaughter, bewailed with blackened faces their lost braves, Little Panther took the warpath alone, following the trails with swift and silent footsteps, like the animal whose name he bore, till he came upon his prey, and then—the tomahawk, death and the scalping-knife!

Ever on the trail of blood could be seen his fierce visage, grim as the panther and, like him, cruel, cold and cunning; a small knife twisted in his scalplock as a standing challenge, always ready for whom might take it.

So Little Panther fought and slew to the end, and only did the decimation of his people cease when he was killed; one day he met his death in a lonely gully near a cave, by the animal whose name he bore. So runs the legend.



"HE WILL LEAD MY PEOPLE TO THEIR DEATH WHEN
I AM GONE."

THE SPORTSMAN'S VIEW-POINT

By Caspar Whitney

The King
is Dead,
Long Live
the King!

School-day psychology taught us to regard the Latin races as the only ones instantly responsive to emotional impulses; but school-day philosophy frequently went astray, and the teachings of the academicians are often found to be misleading on our meeting life face to face as it really exists. The usually imperturbable Briton needs but the prick of the critic to raise him to flights of hysteria; in America we acclaim the victor and damn the vanquished with a fickle fervor unsurpassed by the most volatile Frenchman.

Let a football team win its match in impressive style, and we rise up—unmindful of the silent records of the past, perhaps lacking knowledge of the basic delinquencies which have contributed to the present result—and call that team a wonder. Is our spontaneous tribute emotional, or is it superficiality?

And so the Yale eleven of 1900, because of its crushing defeats of Harvard and Princeton, is being written down as the greatest team in the history of American football. Certainly it was a great team, undoubtedly the greatest Yale has had in three years; but in my judgment, not any greater, individually or collectively considered, than a number of others for which Yale is responsible, especially in the latter eighties and early nineties, and not any greater than the Harvard team of '97. This is true, however, that as calculated to make the most of Princeton's and Harvard's weaknesses, it was a team of the greatest possible effectiveness. By which I mean that no eleven in football history could have administered a more crushing defeat to Harvard and to Princeton.

Yale's
Irresistible
Winning
Qualities.

The overwhelming force of the Yale eleven resulted from its physical strength, superb condition and team play—for no eleven men ever worked more completely in unison than those who had been so thoroughly drilled at New Haven in the autumn of 1900. Apart from this, the men and their game were directed from first to last with distinguished intelligence and judgment by their captain, Mr. F. Gordon Brown. When we come, however, to a critical survey of the team, its kind of work and its *personnel*, we find it entitled to rank among but not above the great elevens of other days. Neither in the character of its game nor in the strength of its individuals is there anything to give it especial distinction on an honor roll of some splendid elevens. Indeed, my honest opinion is that, whatever its potential prowess may be, as it played against Harvard and Princeton, at least, it gave no such exhibition of all-round, well-finished, high-class football as several other old teams, as the Harvard team of '97, for instance, to cite the most recent example.

Yale's irresistible "tackle play" is but a variation of the "guards-back" which Pennsylvania has been using for several years—the dominating principles of both plays being really borrowed from the "flying" formations introduced at Harvard by Mr. Deland six or more years ago. There were no revelations of notable strategic development in Yale's play, though, to be sure, no period in either of her big games suggested the need of it. The tackle play started with a feint at the line and an ably executed delayed pass, and the interference was thoroughly first-class; but the plays in general went off with less speed than has

been the case with other great teams, and there was entirely absent that subtlety of play which constitutes the *finesse* of the game. As I have already said, *finesse* was not necessary to Yale's success; perhaps the team was capable of it, perhaps not; at all events, no evidence of such qualities was forthcoming. Against both Princeton and Harvard Yale won by literally battering the opposing rush line to pieces.

**There
Were
Heroes
before
Agamemnon.**

Considered by the standard of the great players who have made their mark and passed into history, the Yale individuals of 1900 include one only, guard Brown, whose place on the roll of honor is assured. In every other position in the line and back of it Yale alone has furnished men superior to those in her team this year; at guard, of Yale men, only the mighty Heffelfinger, pioneer of modern interference, may be ranked with Brown. Since the victory over Harvard it seems to have become customary, I note, to speak of this year's tackles, Bloomer and Stillman, and full-back Hale as the greatest in their position Yale has ever had. They are all three high-grade men, but such ranking is thoughtless. Have Winter and Wallis been forgotten? As for the full-back—Hale has immense physical strength, and keeps his feet; he can not kick, runs high and is not in the class with Butterworth, for example. I should be interested in seeing what Hale could do behind a line which could not make great avenues for him to run through. He is a first-class line man, but I should rank him second class as a back. His utility would be neutralized where small, quick openings made it imperative for the back to go into them instantly and low. Compare Hale with Butterworth in only this respect, and the two are wide apart. When it comes to kicking, as I have said, they are not to be classed together.

**Yale
Easily
First.**

But this is submitting Yale to the severest possible comparison, and that the team passes the ordeal with honors indicates just how high class an eleven it was. To my

mind, the most impressive feature of Yale's game was the absolute and obvious reliance upon the steadfastness of the forwards for the success of the plays; when the ball went back for a line play there was a perceptible halt while the battering-ram formed behind the runner; and when it swung forward with resistless force every Yale man was in the push—for that is exactly what it came to be. The play depended entirely on the rush line holding off the opponents while the back field formed, and the confidence was well placed. Against forwards of equal physical strength such deliberation in the back field at the beginning of a play would be fatal. Neither Harvard nor Princeton, however, menaced its success. Yale had luck in both games—one touch-down against Harvard, resulting from the latter's poor play, and one because of good fortune; but the fact remains unaltered that Yale outclassed Princeton, and was from one to two touch-downs better than Harvard with the latter at its best. Yale was thoroughly grounded in the fundamentals, drilled to perfection and trained to the hour. It was not a team of many plays, but the ones in its repertory had been thoroughly mastered, and could not have been more efficiently performed.

**Harvard
Smoothed
Yale's
Way.**

It would have been an absorbingly interesting match had Harvard been in fit physical condition when she met Yale, for Harvard's was a resourceful team, an alert and quick-thinking team, having great strength in several directions and depending on no single one alone to advance the ball. It is a pity the team could not have been carried forward in its development from the promising point it disclosed in the first half against Pennsylvania. That game showed the team to be coming, yet the eleven was subsequently handled as though it had reached its physical climax. It never got beyond that Pennsylvania first half in skill nor equaled it in physical condition.

Had only ten days, instead of three weeks, separated the Pennsylvania and Yale games, Harvard would have closed her season in defeat, no doubt, but with more credit. In plain English, the team

was badly handled, and went into the Yale game undertrained, lacking both snap and endurance. If corroboration of this statement were needed, it could be found instantly in the superior showing of the non-coddled substitutes who in the last half of the Yale game took the place of the regulars. Fincke at quarter literally outclassed the work Daly had shown earlier in the game. Gierasch, Ristine, Bowditch, Stillman, all of them outplayed their predecessors. In fact, Sargent, Lawrence and Hallowell were the only regulars to approach form. Had Harvard put on about seven of her substitutes at the beginning of the game, her showing would have been more comforting. And I must not be understood as criticising the players; they played heroically, but were physically unfit for the task, undertrained, in a word, just as was the Princeton team of '97.

Yale had a great team and one clearly entitled to a victory, but the Harvard management made the way very easy.

The series of All-America teams begun by me ten or twelve years ago is continued in the Football Department by Mr. Charles E. Patterson, under the editor's official indorsement.

Lessons of the Season.

Doubtless, Pennsylvania and Cornell will profit by Harvard's as well as by their own schedule mistakes of 1900. The big games of a team cannot safely be separated more than two weeks at the most. Where there are several important and rather even games widely separated it seems out of the question to play equally well in all. Cornell had such a schedule, and consequently played unevenly.

Pennsylvania had its important game very early—too early, in fact—but most commendably maintained its standard in the face of some hard knocks.

The season has again emphasized the fallacy of preliminary training periods and of depending entirely upon one play, be it never so clever. And this latter despite the marked success of Yale, who beat both Harvard and Princeton with practically one play—the tackle play. But three things must be borne in mind in considering this comparison: First,

Yale was an exceptionally strong team physically and in fundamental football; second, in Harvard they encountered a team physically unfitted to stand the gaff; third, in Princeton they found a mediocre team and one tremendously outweighed.

Trend of the Modern Game.

In my judgment, there has been no advance this year in the science of football. Yale's play, the most successful (for the reasons given), while, of course, cleverly executed and seeking in a degree to outwit the opponents, none the less depends practically for its success on the amount of pushing and pulling that can be given the man with the ball—on physical strength, in other words. Suppose, for example, that the dead Harvard team or the light-weight, comparatively speaking, Princeton eleven had tried on Yale the same tackle-play formation which Yale used so successfully against them; what would it have accomplished? Nothing. It would have dropped harmlessly at the feet of those giant forwards like bird-shot on the deck of a man-of-war. Indeed, it would never have got so far; Yale would have smashed it to pieces as she did Harvard's weary interference for lethargic end runs. It was not the tackle play which gave Yale victory; it was the team. It could have won with Pennsylvania's guards-back or with any play of a character similar to these two.

But an end must come to this kind of play—the play that depends on smashing and hauling and brute strength—that is to say, an end must come if the game is to develop along scientific rather than along lines of mere muscular endeavor. At present, East and West, the trend of the game is along the latter lines, though it should be said in passing that Harvard has preserved a more open style of formation and developed more skilled and resourceful all-round play than any other university.

These heavy-weight plays, starting back of the line and battering their way by sheer physical force, are a relic of those old flying wedges and other momentum plays which were ruled against several years ago. The present ones are modified, to be sure, but the principle is

the same, and they are to be met most effectively by increasing the force and speed of the defending side. As the force of the attack increases, the resistance will naturally attain added impetus, and injuries are bound to result as the impact increases in brute force. There is a limit to flesh and bone. But aside from the danger of injuries is the fact that in developing along these lines, the more skilful, the best side of the game is neglected.

**Work
for the
Rules
Committee.**

What we need to insure the most satisfactory and scientific development of football is a rule keeping seven men in the rush line until the ball is snapped. This would make the game more open and, therefore, more interesting to players and spectators; it would raise the average quality of the players, and emphasize the strategic element, which, after all, is the most distinguishing and worthy quality in American Rugby.

If we keep on with these battering plays, the game will entirely lose its mobility.

It will be well, too, to stop those hurdle plays, in which the runner leaps over or into the opposing line feet first. The play bestirs a latent desire to slug, and severe injuries not infrequently result. I have known this season of one man's head gashed open and three others taken out of the game so dazed as not to know which goal they were defending.

Yet another rule is needed so that when there is holding, offside or foul tackling on the part of the defending side, the option of benefiting by the penalty or accepting the play as it resulted should be accorded the attacking side. It now frequently occurs, under the present rule, that recalling the ball is actually of clear advantage to the offenders rather than the penalty the rule is supposed to inflict.

There is one more point, already fully covered in the rules, which should be guarded against by umpires next year—namely, the tendency to wear short, thick iron spikes in the shoes. Certain Columbia men wore them against Yale and Princeton, thereby obtaining a marked advantage; and one Yale player

frankly acknowledged that his team also wore them in the Princeton game.

This is not only unfair, but dangerous, and should be ruled out.

**Lax
Officials.**

With a few distinguished exceptions, the work of game officials this season appears to have been singularly lax. Even the best of them failed to enforce the rule allowing only five men on the side lines. The coaches and the respective college managements ought to have some plain talk from the faculties. Officials like Dashiell, Wrightington, McClung and their kind should be vigorously supported.

I must take this opportunity of commending the splendid work done this season by the Wrenn brothers—Robert and Evarts—in the Middle West. Their prompt and fearless enforcement of the rules has done a great deal to keep the game clean and for honest, manly sport.

**Recruiting
among
School
Boys.**

Rarely was a season supplied with such an abundance of thoroughly good football material at the colleges, yet not for several years have I noted such evidences of recruiting among preparatory schools by the alumni of Eastern colleges. This is an offense which is entirely beyond legislation; yet, it seems to me, it is not beyond the power of parents and preparatory school head masters. I wish I could reach the ear of every father of a football-playing boy. There is nothing so menacing to the amateur spirit of play—or to the amateur spirit of the boy—as recruiting for athletic purposes.

Is it not possible to stop it?

**The
Junket-
Seeking
Athlete.**

Banquo's ghost was unobtrusive as compared with the touring question, which is ever asserting itself in college athletics and will not down. It is difficult to convince young men that these tours of football or baseball teams are harmful to both the individual and to the sport. But so it is. The question has been very thoroughly threshed out with regard to baseball junketings. These trips in the first instance are rarely conceived in the spirit of sport, and too frequently result in bringing the players into contact with

local "sporting" elements, which tend to a decidedly unwholesome influence. The college athlete gets during term time all the legitimate sport which is good for him. Faculties that grant a touring license to an undergraduate team should be held to a strict accounting by the fathers of the members of that team.

Lipton's Great Preparations.

If Sir Thomas does not this time carry off the *America's Cup*, it will not be for lack of employing the best England can produce in the way of yacht designing or building. Such extensive and ably directed preparations have never attended upon the building of a Cup challenger. Two yachts are to be built from Watson designs. One of these is frankly said to be *Shamrock II.*, the challenger; and will be built by Henderson; considerable mystery has enveloped the other. At first, she was said to be for the German Emperor, but subsequently it developed that she was really for the Prince of Wales. Inasmuch as the latter came to Lipton's rescue in '99 by putting *Britannia* into commission as a trial boat when Dunraven had refused to fit out *Valkyrie III.* for the same purpose, there is good reason to believe that the boat of the Prince is building for the purpose of aiding Lipton in his sportsmanly but very considerable undertaking. That the Prince's yacht will be built up to *Shamrock II.*'s class makes the assumption well-nigh a conviction.

Not only will this second boat be of great assistance to Sir Thomas, but it is kindling the interest of Englishmen in the forthcoming race as it has not been stirred since the days of Lieutenant Henn. And it is very sportsmanly on the part of the Prince of Wales.

At this long distance from the event I have the temerity almost to wish that the persistence and the sportsmanship might this year be rewarded to the full of his heart's desire. I am serious in venturing the opinion that yachting would be benefited by the *America's Cup* going to the other side. When it does go, we will have a nice little time winning it back, for there be tides and winds and currents and things in those English waters the like of which we

know not; and racing-machine construction is not suited to ocean voyaging.

New York Syndicate Plans.

We do not have any better sport than we had twenty years ago. The type of yacht as a yacht is neither so slightly nor so serviceable, yet how the cost of producing a Cup defender has grown! The New York syndicate recently announced by the New York Yacht Club as intending to supply the money for a defender consists of Messrs. August Belmont, vice-commodore N. Y. Y. C.; James Stillman, ex-vice-commodore same club; Oliver H. Payne, Frederick G. Bourne and Henry Walters; and it is not improbable that, if they contribute equally, it will cost each one about \$50,000 for his share in the building and running expenses of the proposed boat. *Columbia* cost from first to last about \$200,000, and it is intended to make some improvements in the new yacht. This is not only a strong syndicate financially, but it represents yachtsmen among the best known in America.

Mr. W. Butler Duncan, Jr., who so skilfully handled *Columbia* as a trial boat against *Defender*, has agreed to manage the new boat, and that means she will be sailed to the very best advantage. It is very pleasing to note, too, that Mr. Duncan has engaged an American-born skipper, Urias Rhodes, who is well and favorably known to all active yachtsmen.

Curiously enough, it is not at all easy to secure either a competent native racing skipper or crew; and yachtsmen who, like Mr. Belmont, have at times resorted to English skippers have done so largely because of the impossibility of securing really capable Americans. This reads strangely, yet it is easily explained—the opportunities for advancement and money-making in this country afforded men of every station in life who are industrious, temperate and ambitious. So soon as a Yankee sailor attains to the dignity of helmsman he is apt to look about for a craft for himself, or he becomes an officer on an ocean liner. There are abundant first-class American skippers, but there are a comparatively few to be found open to a season's engagement.

Appreciating these difficulties, therefore, our congratulations to Mr. Duncan are the more spontaneous.

**Boston
to Build
a Defender.**

But no information of the closing century was more pleasing than that coming from Boston which told of Mr. Thomas W. Lawson's intention of building a yacht to compete for the honor of defending the *America's Cup*. It is eminently fitting that Boston and Mr. Lawson should be represented in the preliminary trial races next summer. One is the cradle of American yachting, and the other has thus far been a winner in about every branch of sport he has entered.

If, indeed, there is any place whence a Cup defender should come, it is self-reliant, queer but endearing little Boston, which supplied the designer, the owners and the boats—*Puritan*, *Mayflower*, *Volunteer*—that successfully defended the Cup in the first years of the Cup racing revival. Since the *Valkyrie I.* year, when Boston's *Jubilee* and *Pilgrim* were beaten by *Vigilant*, New York has supplied the money and Bristol the boats.

Mr. Lawson announces that the designs will be made by Mr. B. B. Crowninshield, and the boat constructed by Mr. George F. Lawley; that it will be a Boston boat completely, and sailed and managed by local sailors and yachtsmen.

May good fortune attend it!

**Mr. Lawson
Quite
Eligible.**

There has been some speculation, I note, concerning Mr. Lawson's eligibility to compete against the New York boat for the honor of defending the Cup. None would be quicker to scoff at the mere thought of raising such a question than the sportsmen of the New York Yacht Club. Although the guardian of the trophy and the sponsor for the Deed of Gift, the New York Yacht Club appreciates that the *America's Cup* is not a mere club trophy, but an emblem of national significance; and its Committee seek the ablest defense of the Cup above all else. There will be no doubt of Mr. Lawson's boat being welcomed to the trial races.

**Is the
Machine
Type
the Only
Fast Type?**

Nothing has come to pass which has pleased yachtsmen so thoroughly as Mr. Lawson's decision to build this aspirant for Cup defense honors. In the first place, it will make the trial racing between the Boston and New York boats of enormous interest—little less, indeed, than will be aroused later by the contest between challenger and defender; in the second place, it is of immeasurable importance to American yachting that our big racing machines come not all from the same designer. It is of great moment to yachtsmen to learn if so much of the yacht must be sacrificed to the machine in the strife for great speed.

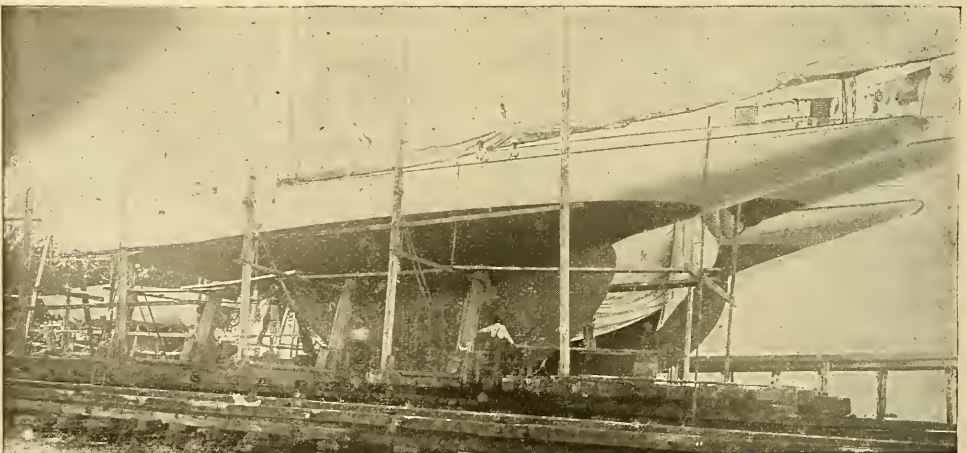


Photo taken at City Island, 1900.

(1) "RAINBOW," (2) "COLUMBIA" AND (3) "DEFENDER" SIDE BY SIDE.

Perhaps it must; at all events, it will be convincing if the verdict come to us from more than one shop.

No trial boat or defender has come from another shop but Herreshoff's since *Vigilant* in '93; no other designer has been asked to submit lines. Meantime, there has been tremendous activity in small boat designing and racing, and in this direction Mr. Crowninshield has attained great distinction. Last season, for example, Mr. Crowninshield designed, among others, two raceabouts, *Jolly Roger* and *Scamp*; the first made the best racing record among a large fleet in Boston waters, and *Scamp* was equally successful on Long Island Sound in quite a good-sized class, which included *Sis*, a Herreshoff boat. These raceabouts are 21-footers, and the especially notable quality of those from Crowninshield designs is that they are not mere "freaks," but healthy types of real boats.

Can the same qualities be carried into a 90-footer, or is there no escape from the extreme racing-machine type of which *Vigilant* in Cup defenders was the forerunner? It may be that Mr. Crowninshield will follow Mr. Herreshoff's lead, as have the English designers, Messrs. Watson & Fife, Jr. Perhaps no other model attains to such speed as these 90-footers have disclosed. Yet I incline to the opinion that the Boston boat will be more of the yacht and less of the freak type; and should it be successful on such lines, Mr. Lawson will have done yachting so great a service as to insure for himself and for Boston designers and builders fame imperishable and gratitude everlasting from all American sportsmen.

What the New Boats are Likely to Show.

After the exhaustive experiments of the last half dozen years it is difficult to see in what particular of construction there now remains occasion for further trial making. It seems reasonable to conclude that neither Watson nor Herreshoff will use a beam of less than twenty-four feet with the lessons of *Valkyrie III.*, *Columbia*, *Defender* and *Shamrock I.* before them. Nor is it likely that American builders, at least, will venture to try

other plating than the Tobin bronze, which was found to be so highly satisfactory on *Columbia*. So, too, there is likely to be no departure from nickel steel for the framing, the Herreshoff boats having demonstrated that to be the most desirable from every point of view. Thus, there remains no reason in structural matters for experimenting, no more by Mr. Crowninshield than by Mr. Herreshoff, of whose practical settlement of these matters designers here and abroad reap the benefit.

Despite these patent facts, however, English designers, after the truly British manner of obstinately adhering to tradition, have failed to take immediate advantage of the experience of the more alert minds on this side the Atlantic.

Last year, for example, some aluminum plating was used on *Shamrock's* under body, and just now has been discovered what was demonstrated over here several years ago—namely, that this metal can not be depended upon to maintain an absolutely smooth surface. The plates on *Shamrock I.* were found to be pitted, and will be replaced by steel—incidentally, this will increase her weight.

Undoubtedly, Mr. Watson will strive to duplicate as nearly as may be the lines of *Columbia*, seeking the solution of how to give his model more driving power. How *Columbia*, as an exquisite type of the racing machine, can be improved upon is difficult of conception to the lay mind. The only refinement possible appears to be in cutting away the under body, and it would seem as if that could be done only at the risk of lessening the boat's stability. The problem presenting itself is, of course—given the prime essential of a big spread of canvas—how far can the under body be whittled away? Herreshoff has usually harmonized the two with masterful ability (though he went sadly astray in the case of *Colonia*); the English designers have approached the question less boldly.

The desirable draught and beam are, perhaps, about determined, so that the real test in 1901 will be in the refinement of lines, reckoning easiness as of great account. It is safe to say, therefore,

that the models of Messrs. Herreshoff, Crowninshield and Watson will be awaited with greater curiosity and deeper interest than has yet attended upon the preliminaries of any previous Cup race.

**A High
Average
Quality
at the
New York
Horse Show.**

The New York National Association has held horse shows in the Madison Square Garden, in which there have been individuals—many of them, in fact—of higher quality, but I am of the opinion that no show has been held in New York in which the number of genuinely good entries was greater. The average, in a word, was higher than in any previous year, taking number of entries into consideration; and this comment refers particularly to the harness classes. In the saddle classes the average was only fair, with some exceptional individuals. Not that good horseflesh was lacking in these classes, but it was not properly placed. It seems very difficult for Atlantic coast exhibitors to learn what the saddle type is; and I must confess that some of the judging of which we have been spectators, especially this year at the Garden, is not calculated to enlighten them.

Really, we of the East appear not to know a saddle type when we see it; the National Association next year should send out to Missouri or to Kentucky or to Virginia for a judge. A saddle type is a known and accepted quantity in those States.

It is amazing how the harness classes in singles and pairs have developed this class of animal and improved the appointments until the average is higher than may be seen elsewhere in the world. The London or Paris shows do not make nearly such a general exhibition; and Berlin—well, the Germans have much yet to learn respecting harness horses and equipment before their show is worthy of consideration. But every year I am surprised at the indifferent showing in New York of tandems and fours; except that the mere horseflesh has shared in the general improvement, these classes appear to stand where they were half a dozen years ago. Indeed, that is not quite true—they have deteriorated.

This is a somewhat unexpected state of affairs, especially as regards fours, in view of the considerable recent development in coaching and general road driving. Yet in road fours there was an absurdly small entry. Especially noticeable is the diminishing number of amateur whips; while rapidly increasing on the road, these are as rapidly decreasing in the show ring. True alike of tandems as of fours. The explanation is found in the gradual evolution which is surely turning the event in New York into a dealers' show. This is also true of many shows elsewhere. Curiously, the National Association officers blind themselves to the inevitable by annually booming the show's social features. This year, again, the box-holders were catalogued along with the horses! Sickening vulgarity calculated to swell the gate receipts!

What a pity breeders do not get together and form a real national association!

**The
Hackney
Wins
Ribbons.**

Though I am no admirer of the hackney, and fail to see just how his service is to prove commensurate with what he has already cost, yet it is a pleasure to note that his record at the recent New York show was better than in any previous year. In number of individuals and of classes he was very much less in evidence than formerly, but practically he surpassed any achievements of which I have been a witness. A hackney-Orloff was third in the special Whitney prize class—a poor one, I must add—for stallions suitable for getting carriage horses; a hackney mare was fourth in a single open harness class where thirty-eight were shown; a third prize was carried off in the large tandem; and in the small and medium tandem classes one first and two second prizes went to teams, in each instance made up of a hackney and a trotter bred. But perhaps the most signal hackney victory was in the pony classes, where the hackney stallion Dilham Prime Minister defeated the trotter-bred stallion Glorious Bonnie; and in the middle-weight hunter class, in which a two-year-old mare by a hackney out of a thoroughbred took third prize. Perhaps at this late day the breeders are learning how

to utilize the undeniable good there is in the hackney blood. Certainly, all sportsmen will be pleased if a way has been discovered by which the gentlemen who invested so heavily in this type may

cavalry horse on the lines of the park hack?

The special prize offered by the Hon. W. C. Whitney for "stallions other than hackneys suitable for getting carriage horses" was, no doubt, well meant; but it is hard to conceive of conditions leading to more unimportant or inconclusive results. It was a pity to waste \$500 on such a useless prize.

The object sought being the creation of the best type of harness-horse getter, why draw the line on the hackney? Not, perhaps, that the American harness horse of the future would suffer thereby—but why rule him out? That, however, was not a very important matter. The real point of absurdity

in this class was the fact that although specifically for the purpose of judging "stallions suitable for getting," yet the conditions provided that the stallions were to be shown *not with their get*, but simply in hand—no get being required. How any judge, learned or otherwise,

now employ the hackney with profit to themselves and advantage to the American heavy-harness horse.

Wasting Good Money. New York, as it invariably does, furnished some very amusing classes and decisions.

In the class for horses suitable for cavalry service the judge gave the prize to a horse with docked tail, its rider, with short stirrups, rising to the trot, and using both hands! The fact that the judge was Colonel Hein, of West Point, makes the decision the more incomprehensible. Those of us who follow these matters closely know that troopers sit the trot, with reins in one hand, and that bobtailed horses are not purchased by the American Government for its cavalry. Perhaps the Colonel had in mind remounts for the Philip-

pine service; or has the new Army Bill reconstructed our troopers' style and the

could decide on the ability of these stallions to get harness or any horse, I



Photo by Pach, N. Y.

LADY ALGY.

Winner single-harness (over 15.2) championship at the New York Show.



Photo by Hewitt.

LORD BRILLIANT.

Winner single-harness (under 15.2) championship at the New York Show.

should like some one—Mr. Whitney, for instance—to explain to me; the procreative ability may not be adjudged by inductive reasoning. Parenthetically, let me add, that the stallion given the prize in this class was beaten for the championship in the single-harness class—beaten in a class for which earlier in the week he had been chosen an ideal sire! Evidently, the judges had no type prejudice.

Is
Type
to be
Respected?

But this inconstancy to a given type was, perhaps, more brilliantly illustrated in the competition for the Waldorf-Astoria Challenge Cup. The conditions of this prize read, "For the best horse suitable for a gig," and the class is considered one of the most important of the week. The winner has almost invariably been the best harness horse of the show. In '97 it was won by Mr. J. E. Widener's Von Harbinger, 15.1½; in '98 by Mr. Bostwick's Lady Ursula, 15.2; in '99 by Mr. W. L. Elkins's Red Cloud, 15.3½. This year it was awarded to Mr. H. C. Hoskier's Lord Brilliant, 14.3½. Here is a variance of opinion as to the type a gig horse should be. Mr. Hoskier's horse has superb conformation, brilliant action and good speed, but in the opinion of a majority of horsemen, I think he is regarded as too small. It seems to me the horse is out of his class and the judges decidedly off their reckoning. From time immemorial a horse suitable for a gig has been one of fairly good size. 14.3½ is getting down pretty close to pony limits. One would scarcely seek as a genuine gig type a horse under fifteen hands. This is not to say that Lord Brilliant is not the grand horse he is.

The hunter classes—which, by the way, were not especially good, provided a share of whimsical decisions, none more so than in the light-weight qualified, where second was given to a mare which should have been shown the gate. The hunter classes appear to have largely degenerated to show-ring jumpers of various weights, colors and breeds. The hunt clubs seem to have entirely lost interest in these classes, except in so far as they provide a more or less entertaining spectacle; few hunting men show.

Fine
Types
at
Western
Horse
Shows.

It would, I fancy, surprise the average Eastern man if he could see some of the types of horses that are winning at the shows held annually at Denver, St. Louis, Kansas City. There is yet, of course, not the refinement of appointment, not the elaborate equipment, but there is no discounting the horseflesh. This is especially so of the saddle and the roadster classes; and in this section of the country roadster has some significance. It is not misapplied to the high-strung, delicately fashioned trotter of the 2.20 class, but to the up-standing good-boned and well-turned animal who can pull a four-wheel trap along at a good pace and keep it up all day. Taking the country from end to end, this is the type of horse used more than any other—ten to one. Yet we rarely see him in Eastern shows.

It is notable, too, what an advance has been made in Western shows in the matter of appointments. I have been frankly surprised at the manner in which traps are turned out in, say, Denver, for instance. The same is true of the West generally, even in Kansas City, of which one's recollections are more apt to be of the stoek-yards than of the driveway. Yet Kansas City really has unexcelled advantages for driving, and makes a commendable display at its horse show. I note with regret the obvious efforts making in several Western directions to turn their shows into "society events;" I fear these good people have been led astray by the twaddle of the New York newspapers' society reporters.

Western horsemen and horse show managers will best consult their interests and those of the breeder by leaving "society" to its own devices.

That was a remarkable committee decision which recently prohibited a woman from riding astride at the Chicago Horse Show. It was not only presumptuous, but of a type of narrow-mindedness which I thought had no place in the intellectual expansion of the middle West. But Chicago does now and again unearth some mortal of startling eccentricity, not to say unlovely ignorance. Was it not in Chicago that



STEAM YACHT "ARROW," DESIGNED TO TRAVEL FORTY-TWO MILES AN HOUR.

a more or less prominent citizen arrayed himself in evening clothes to attend the luncheon given a distinguished visitor?

A Two-minute Trotter.

The price of \$26,500 paid by Mr. John J. Scannell for The Abbot, although the largest figures ever given at public auction for a trotting gelding, is less than that paid by the final owners of the other great trotters—Dexter, Rarus, Maud S. or Nancy Hanks. Viewed in the light of its intrinsic value, \$26,500 is a goodly sum; yet, considering last season's work of The Abbot and the fact that he appears to be the one animal in sight likely to attain the two-minute goal, the figures do not appear to correspond with the trotter's prospects. Yet the fact of his being a gelding really is sufficient answer. With such a past and such promise for the near future, he must have fetched twice \$26,500 had he been a stallion.

The Abbot, by Chimes; Nettie King, by Mambrino King—an illustrious lineage—was foaled in '93, and began his racing career in '97 with a record of 2.11½. During the following year he started ten times and won all but three races, reducing his record to 2.08. In '99 he again started ten times, winning every race and reducing his record to 2.06¼. During the past season he was only started to beat the world's record. In July, at Detroit, he went a mile in 2.07, last half in 1.02; a week later, at Cleveland, he trotted to a record of 2.05½. At Readville, Mass., in August, he did a mile in 2.05¾. At Providence, R. I.,

later, he equaled the world's record for geldings, 2.04¾. September 7, at Hartford, Conn., he made the world's wagon record of 2.05½; the next week, at Yonkers, N. Y., he trotted a mile to sulky in 2.04, and followed this at Terre Haute, Ind., by trotting a mile in 2.03¼, and beating by half a second the best previous trotting record.

He has never, by the way, trotted in hopples, as stated.

This is a noble record, and stamps him an animal of remarkable speed and stamina. If a horse is ever to attain the two-minute mark, concerning which there has been such an amount of speculation, The Abbot seems to be the one most likely to accomplish it, for he has shown his capacity steadily to increase, and is now in the prime of his power, sound in wind and limb.

The Blessings of Cycle Paths.

With the construction of cycle paths now in contemplation, touring on an extensive scale, which is now impracticable in many parts of the United States, will not only become possible, but pleasurable.

Nor can the proposed development in this respect fail of giving a wonderful impetus to the sport of wheeling, as well as lead to a more general use of the bicycle in recreative life.

It is occasion for native chagrin to compare the touring facilities of the United States with those of European countries. Our excuse, that we can not afford the expensive roads of those countries, no longer exists. The cycle path is not expensive. We can afford it, and we can not afford to do without it.

Besides providing a healthful, pleasurable means of recreation for ourselves, it will tend to keep numbers of tourists and money at home, and offset the stream of both which continually flows from the United States to Europe. The trunk-line system of side paths for bicycles will make it possible for United States citizens of moderate means to see and know something of their own country besides what they read in books. Not the least of its blessings will be a checking of that neurotic condition prevalent among Americans which a German physician calls *Americanitis*.

**Sectional
Instead of
State
L. A. W.
Divisions.**

The acrimonious letters which have been passing between Mr. Bassett, secretary of the League of American Wheelmen, and several of the officials of the New York State Division may be highly entertaining to the friends of the gentlemen engaged in the dispute, but they are viewed with much grievous disquietude by sportsmen. Lacking either wit or literary excellence, they make dull reading, indeed, for the average wheelman, who wonders why they are made public. The ostensible cause of the correspondence is the proposition coming from the L. A. W. some time since that individual and home government of State divisions be abolished. But this appears to have been forgotten in the exchange of personal compliments. There is so much personal feeling in the dispute, in fact, that the merits of the original question are quite lost to sight—and the matter is too important to be thus swallowed up by selfish motives.

The suggestion came from the L. A. W. originally for the purpose of making possible the needed reduction in running expenses. It is a matter well worthy of serious consideration—indeed, imperative to the continued prosperity of the League. It would not be altogether wise, nor needful, perhaps, to transfer the government of all the States to the one official head of the L. A. W., but there is no question of the merit in the suggested reduction of individual State government, especially now that racing has been abandoned.

Why would not the consolidation of States into sectional bodies be an excel-

lent compromise? In this way there could remain local officials, and the business and expense would be greatly reduced without lessening the benefit to the individual wheelman.

The energy of the L. A. W. should now be all directed towards the development of touring, the improvements of roads and the building of side paths. I am inclined to believe that sectional divisions would work with better results than State divisions on such matters.

At all events, it would be more seemly if the L. A. W. and the New York officials would drop the personal equation and address themselves to the needs of the national organization.

**Cost of
1901
Bicycles.** The prices of the 1901 models show no change from those which prevailed in 1900; the highest-grade chainless wheels cost \$75, some makes selling at \$60, and 1900 models listing at \$50. Chain wheels sell at \$50 for the highest grades, with second grades listing from \$35 to \$25.

These are the figures announced by the "trust," as the American Bicycle Company is commonly called, but as the independent makers show a disposition to follow the lead of the A. B. C., the prospect of getting an equal grade of wheel at lower figures in the new century appears to be slight. Bicycles are not being rushed upon the market in the quantities of a few years ago; it will be an excellent thing for every one when the list of manufacturers is still further reduced until none remain but the really first-class plants competent to turn out a high-grade machine.

But bicycling is a long way from being "dead," as I see reported occasionally. The fever which invariably besets any new diversion has passed, and with it have gone that class of people who try everything while it is new, and never continue a supporter of any. The bicycle has become, perhaps, too common in the land to be longer looked upon as a mere vehicle of sport; but certainly it continues to be one of the most dependable and pleasurable aids to the joy of country living and the most health-giving form of rapid transit in escaping the screaming city.

**A Yacht
of Express
Train
Speed.**

Speculation as to the probability of a two-minute trotter suggests thought of the marvelous speed development in steam craft. Not so long ago twenty knots an hour was considered wonderful speed for a boat propelled by steam; and when a torpedo boat attained five knots more the limit to the lay mind, at least, appeared to have been reached. But recently over thirty miles the hour have been made, and Mr. Charles R. Flint is about finishing a launch that is guaranteed to make a speed of forty-two miles the hour, and which he confidently expects will travel some miles at the rate of forty-six. He has appropriately named this ghost of a craft the *Arrow*, and the illustrations show her shortly after launching, a couple of months ago.

Her dimensions are 130 feet 4 inches over all, and 130 feet on the water-line; 12.6 feet beam, 4.7 feet draught; coal-bunker capacity, 17 tons; water-tanks, 1500 gallons; steel frames below water and aluminum above. She is fitted with seven water-tight compartments; has an owner's stateroom and a saloon, both the width of the boat, the former 7.6 feet and the latter 13.6 feet long, abaft the engine; and quarters for officers and crew of twelve men forward of the engine. The only deck structure will be 15 feet long, used for pilot-house and dining saloon.

Her reciprocal engines are quadruple-expansion, developing 6000 horsepower, an enormous amount for a boat of this size. If she does not shake herself to pieces, Mr. Flint expects to cover more miles in an hour than has ever been done—forty-six miles—the speed of an express train.

**The Gun
Does Not
Make the
Sportsman.**

My interest has been sincerely aroused by a letter from a Middle Western correspondent, who takes me to task for some recent criticism of a man using the "pump gun." He very rightly maintains that "a true sportsman would never besmirch himself, no matter what kind of a gun he used."

And I am free to confess that he is right, and after very careful investigation to acknowledge that my unfavorable comment on the repeating shotgun was

due largely to the misleading reports of what game butchers were doing with this gun; and, too, perhaps to sentiment favoring the least destructive arm. I should be truly pleased, such is my concern in the protection of bird life, to see muzzle-loading shotguns replace the modern ones. But there really has been, I find, a great deal of ignorant criticism of the "pump gun," which actually has the great merit, on account of its low price, of opening the pleasures of the shooting field to many poor men who otherwise could not afford them.

It is quite true, however, that the tool does not of itself make or unmake the sportsman; yet a sportsman, as an amateur, must be judged by his associates, and he should beware that he does not encourage bird slaughter by countenancing it in an associate, or himself take advantage in exciting moments of the repeating possibilities of his gun. The danger, from the view-point of the game protectionist, in the modern gun is not that it encourages undue killing by sportsmen, but that it puts a more deadly weapon in the hands of the vicious. Therefore, there is need of constant watchfulness on the part of sportsmen and unrelaxing influence by precept and example in the direction of moderation.

Laws and rules are made not to guide the strong, but the weak; and human frailty is always largely preponderant. An honest man needs no menace of law to keep him from laying hands on the *lares et penates* of his neighbor; yet who would advise abolishing the law and the penalty for stealing simply because some of us are honest, and need them not?

Hence, let the law against the slaughter of game be strengthened, and let every sportsman bear in mind that the sportsman's example is his most valuable service in the cause of game protection.

**International
Athletic
Organization.**

There appears this winter to be an epidemic of "association" making, one of the most recent outbursts being the so-called international union between the French Athletic Society and the Amateur Athletic Union. What possible occasion is likely to arise for such a union, or what its usefulness at home or abroad, are matters not at all

clear. It may preside, of course, at athletic games held jointly by the Amateur Athletic Union and French Society clubs, and that, in a sense, is international; but it hardly seems necessary to form a new organization for such dual contests. To be sure, it will provide some offices for ambitious young men on both sides the water; and, perhaps, in that direction, after all, lies the *raison d'être* of the new association.

The only genuinely international athletic meeting is, of course, the Olympic Games, of which the life and the real competition are the university athletes of England and America. For these events there is already an International Olympian Committee, of which Baron Pierre de Coubertin is president and Professor William M. Sloane, of Princeton and Columbia, the American member. This Committee was organized in 1894 for the sole purpose of conducting the Olympic Games; and as its members represent thirteen different countries, its international character is not to be disputed. The high character of the Committee's *personnel* is suggested to Americans by the active membership of a scholar and a sportsman such as Professor Sloane.

A Few Plain Words.

I note through the columns of the newspapers that the Amateur Athletic Union-French Society combination is cherishing an ambition to hold the next Olympic Games under its auspices; this is so little creditable to either the sportsmanship or the common-sense of these gentlemen that I am inclined to disbelieve common report. The members of the International Olympian Committee are among the most prominent friends of amateur sport in their respective countries; they have the confidence of English and American sportsmen, and the practical knowledge as to the conduct of athletic meetings. If the gentlemen responsible for the Amateur Athletic Union-French Society consolidation are wise or really impelled by a genuine interest in the welfare of amateur athletics, they will disclaim all thought of intruding upon a field already cared for infinitely better than they could hope to do. It would be too

bad should they become obtrusive, since such rashness must result in humiliation, which they can easily avoid.

It is to be remembered that actual club-track athletics either in England or in America amount to little in the eyes of sportsmen, and that the Amateur Athletic Union of this country and the corresponding association of Great Britain are bodies whose spheres of influence are absurdly inadequate to their pretensions. In point of fact, it does not extend beyond a handful of clubs.

For example, confining ourselves to America, the Amateur Athletic Union has literally no influence in college athletics, officially or sentimentally, and there is so little track athletic activity outside of the colleges as hardly to give it a name. And the clubs which are active draw their athletes from the colleges. Hence, the Intercollegiate Athletic Association, and not the Amateur Athletic Union, is the real controller of American athletics. In England, about the only club with high-class athletic material is the London Athletic Club; and this, too, is dependent very largely upon Oxford and Cambridge universities for reinforcements.

Thus, it becomes evident that without the support of the colleges an international athletic meeting would be impossible, or any meeting so styled of such mediocre quality as to bring ridicule upon its projectors.

The International Olympian Committee is indorsed by Harvard, Yale, Princeton, Columbia and Pennsylvania.

The next Olympian Games will be held in 1904, under the auspices of the International Olympian Committee, and most likely in New York.

Plenty of Work at Home.

To the unprejudiced observer there appears to be a sufficient number of local problems to occupy the full time and thought of both the French Athletic Society and the Amateur Athletic Union. The former can employ itself most profitably cleansing its rowing, arousing a genuine sport interest among its members, that will lead to performances of merit, and studying the management of athletic meetings in order that other muddles such as obtained at the Exposi-

tion games last year may not recur. The idea of this Society becoming one of two parties to set up an international athletic Circumlocution office is convulsing in its humor. Why not cross the Channel, and first try it on the English? They would be sure to give an attentive ear after their experience at the Paris games!

Until the Amateur Athletic Union gives more convincing evidence of its ability to govern wisely its own little affairs, it would be as well, perhaps, to stifle international legislative ambitions. For a long time now sportsmen have been awaiting some official action on the water-polo scandal which followed the series of so-called championship games given in Madison Square Garden during the New York Sportsmen's Exposition. At the present writing sportsmen are still waiting. Meanwhile, the Amateur Athletic Union appears content to remain inactive concerning about as disgraceful an incident as I ever remember in amateur sport. Every member of the New York and of the Knickerbocker Athletic Club teams should have been suspended long ago and kept so until that fake championship game had been probed to the depths. The prompt action of the New York Athletic Club officials in disciplining their team is to be commended.

Middle Atlantic Division Needed.

Another direction in which the Amateur Athletic Union should bestir itself is in dividing the Atlantic Association. For some time it has been apparent to the unprejudiced mind that an injustice was being done the clubs in the southern end of this division by the control remaining in Philadelphia. Petitions have been made to the Amateur Athletic Union, but invariably refused, though no good and sufficient reasons have been advanced therefor. One is compelled to the unpleasant conclusion that political jobbery, and nothing else, is responsible for the deaf official ear that has been turned to the supplication of these athletes.

There should be created a Middle Atlantic Division, to include Maryland, the District of Columbia, Virginia, West Virginia, North Carolina and South

Carolina; at present these are in the Atlantic Division, with headquarters at Philadelphia. They are really among the most active athletic districts, while Philadelphia, athletically speaking, is moribund. In political jobbery, however, and in corrupt athletics the Atlantic Division is, perhaps, the livest member of the Amateur Athletic Union.

W. B. Curtis Memorial.

The athletes of the country will be pleased to hear that a movement is making by members of the New York Athletic Club to raise an appropriate monument to the memory of the late William B. Curtis. It is proposed that the subscription be a popular one; and there will be few athletes, I fancy, who will not wish to contribute their mites to a memorial of "Father Bill."

How to Treat the Golf Professional.

I am often irritated beyond suppression by the manner in which I see golf professionals and club instructors treated by members and their guests. This suggests the thought of how many people there are who do not know how to treat servants properly; which, in turn, prompts the statement that there is no surer revelation of a man's or a woman's breeding than through their conduct towards servants.

Any fairly close observer will find two classes of men on the golf links very much in evidence—one that treats the professional with the familiarity of a crony, and another that treats him as though he were a creature without thought or feeling. Each in his way is striving to impress his own exalted station upon the poor professional, and neither is conducting himself as a well-bred gentleman. The man who treats menials like a dog, lest they think him not a gentleman to the manner born, is, perhaps, the more insufferable cad of the two; but he of the familiarly confidential manner has, no doubt, created the more mischief. For it is the latter man who has corrupted the good manners of the imported English and Scotch professionals until they have become impertinent and tremendously set up with their importance.

Too much money and the very bad

manners of a large proportion of the gentlemen with whom they have come into contact have really spoiled a considerable number of golf professionals.

An instructor in manners would have no sinecure in our golf clubs; pending the creation of such an office, however, a much improved situation will result from professionals being treated as well-paid, self-respecting club servants.

State Organization. Considering the benefit to be derived from it, the organization on State association lines is an idea that appears to develop very slowly in the East. Over Boston way it moves with especial sluggishness, notwithstanding some valuable missionary work by *Golf and Lawn Tennis*, a little journal which, I note, hits the nail on the head with great precision and frequency. But Massachusetts golfers are slow to move, even on the links, until driven into from behind. The West, as usual, is wide-awake to the advantages of State organization.

Theory and Practice. The thought of stocking the Adirondacks with moose and elk is a beautiful one, eminently fitting to be the theme of many a post-prandial discussion among sportsmen. Some gentlemen, I observe, have considered it sufficiently prolific of controversial pleasures as to enrol themselves, at the very moderate figure of \$1 a head, into an "Association for Restoring Moose to the Adirondacks." But like a great many other beautiful thoughts, this one, I fear me, must feed upon its own loveliness; and its development be arrested in immaturity by the unpoetic though obstinate demands of practicability.

It is entirely possible, of course, to fence off a given number of acres in the Adirondacks and maintain moose and elk in semi-wildness. But the establishment of a "zoo" is not, I take it, the mission of the gentlemen who have pledged themselves to "restore" moose to the great North Woods of New York. Nor do I fancy that Mr. W. C. Whitney's generous offer to turn over his private herd of elk to the Forest, Fish and Game Commission takes the "zoo" idea into consideration. Yet I think most sportsmen will agree with me that, except on

the park idea, restoration and propagation of moose and elk in the Adirondacks can not be carried through to a successful, which implies, of course, a permanent, issue. It is a disappointing and a sorrowful conclusion, for the scheme is most commendable, but it seems to be the only one.

The Adirondacks, despite its considerable expanses of wooded and unsettled territory, has, none the less, taken on too much of the nature of a picnic ground to permit moose to thrive in a wild state; and it is not elk country. Yet why not make a great park of a given section of the Adirondacks? It is better to have fenced-in moose and elk than to have allowed Mr. Whitney's generous offer to go a-begging, or the gentlemen of the Restoring Association to have pledged their dollar in vain. Besides, OUTING has some wire fencing, a relic of the old company, which it will be pleased to contribute at a nominal sum.

Slaughtering Caribou. Unless restrictive measures are adopted very speedily by the Newfoundland authorities, the caribou will disappear from the face of their land, as have the moose from the Rocky Mountain districts. The slaughter that has been going on this last autumn is nowhere, to my knowledge, duplicated except in the far Northwest, on the borders of Great Slave Lake, where the miserable, half-starved Indians indulge in an annual butchery. But there is no such excuse in Newfoundland, nor are the butchers Indians. They are white men, mostly natives, some Canadians and Englishmen, very few Americans—Heaven be praised for the fewness. The slaughter is conducted in this manner: It is at the period of caribou migration from the north to the south of the island, and great "leads" (herds), strung out to considerable length, are continually crossing the railroad. The butchers take up their position along the railroad at one of these "leads," and simply sit there, killing the stupid creatures as they pass before them!

Mr. F. C. Selous, the well-known hunter, who left the railroad section last autumn in disgust and without once pulling trigger, told me he had seen

quantities of dead caribou lying untouched where they had been wantonly shot down. It is hard to believe that such two-legged beasts roam unmarked in our midst.

Newfoundland would better make its close season begin with the period of caribou migration, else it will be the story of the buffalo over again.

**Every
Game
Warden
a Deputy
U. S. Marshal.**

On the whole, the game season in America has been a very satisfactory one from both a protective and a sport-giving point of view. Birds have been fairly plentiful—some remarkable flights of woodcock—and the Lacey law has thus early proved of great benefit to quail. But there is one weak point in the Lacey law which should be immediately strengthened—at present a State warden must hunt up a United States marshal for authority to open suspected packages of game in transit. This can be and should be obviated by making every State game warden a deputy United States marshal.

There is talk in Maine of making September a non-license month, and it will be an excellent provision if to it is a clause forbidding the taking in of firearms during any close season. September is a particularly dry month, and the damage resulting from forest fires last season has awakened the Maine legislators to the need of doing something to protect their lumber interests. It would be well if every State followed Maine's example.

In the middle Northwest the number of deer killed has been unusually large, suggesting the advisability of reducing the allowance permitted each hunter.

The performance of their duties by game wardens has averaged higher; and, altogether, there appears to be a growing intelligence among legislators and an awakening of people generally to the practical value of game protection and forest preservation.

**Zeal
Without
Intelligence.** Next to the weakly good, spare us visitations of that creature of unintelligently directed zeal—perhaps, the most thoroughly exasperating and trouble-breeding element in our social

economy—and in his stead give us, in matters of organization or reform, to deal with the less disquieting, less unmanageable, frankly or covertly vicious. How often is a good work that is nearing its fruition suddenly halted, perhaps wrecked, by some irresponsible zealot of heavy hand and unseeing eye!

That was an ill-conceived, not to say presumptuous, plan by which a so-called National League of Amateur Driving Clubs was formed in New York just after the Horse Show. It was not only a high-handed procedure, but apparently lacked realization of how obviously the gentlemen were defeating their professed mission—that of placing road driving on an honest amateur basis.

There is no manner of doubt that amateur road and track driving are in need of some unequivocal legislation; so it is equally patent that organization of the clubs into a national association is the desirable as well as the wisest means to attaining that end. In so far as indorsing these sentiments, Messrs. Quimby, Billings and Devereaux, representing Boston, Chicago, Pittsburg, Cleveland and Kansas City, and the sponsors for the new league, were lending valuable aid to the good cause. But when the representatives of these five clubs, without inviting or even consulting members of any of the other clubs, entered upon the organization of a national league, they assumed authority of which they were not possessed. Granting their desire to have been purification of the sport, it was surely an unwarranted conclusion to assume their clubs the only ones, among thirty-seven, desirous of improving existing conditions. And mark the result of their blundering zeal. Whereas a general consultation would have resulted in a genuine national league and a selected roster of clubs united for the good of the sport, now, by the premature action of these men, the ignored clubs are naturally offended, and trouble is imminent.

**The
Pharisee
and the
Sportsman.** So far I have credited the action of these gentlemen to a somewhat unintelligently directed but genuine desire to help the sport; but there are some indications, I regret to say,

that point to their having more concern for themselves than for the sport. The organization of a national league and the revision of the present legislation pertaining to amateur status, driving, etc., are by no means new ideas, nor did they originate with anyone of the gentlemen responsible for the recently formed league, or in any one of the five clubs which they represented. In point of fact, Dr. Kane, president of the Road Drivers' Association of New York, and one of the best-known amateur reinsmen in the country, was practically the prime mover in the national league scheme. Not only had he been advocating it and canvassing the subject among the clubs, but he had shown the quality of his sportsmanship by handing the results of his labors over to Mr. Quimby, of the Boston club, in courteous belief that the older club should have the honor officially of uttering the unanimous sentiment for reorganization.

For the representatives, therefore, of Chicago, Boston, Cincinnati, Cleveland and Pittsburg secretly to launch a national league from a New York hotel was a twofold offense of peculiar hatefulness; it was stealing another's thunder, and treating Dr. Kane with extreme and entirely unmerited discourtesy. It was a boorish piece of business from beginning to end, and reflects no credit on any of the clubs connected with it.

Not satisfied with the assumption of national legislative responsibility and interruption of the reform movement through premature and bungling organization, these gentlemen forthwith took unto themselves the additional duty of national censor, and proceeded to offend all the members of the omitted clubs by declaring them ethically and socially unfit for association with the chosen.

Dear me! What a scurrying into bomb-proof dwellings must ensue in the five chosen cities if their glass houses are assailed!

Really, were it not that these gentlemen had seemingly gone out of their way to give offense, their assumption of national leadership would be viewed purely from its mirth-provoking side. For there is, indeed, a quaint humor in

five clubs aspiring to the dictatorship of thirty-seven. As it is, however, we must accept their action as a serious attempt at solving the present problems of amateur road driving, and scrutinize it accordingly.

From this point of view, I can find nothing in any of their official utterances which entitles them to take the lead, not to say entire control, in the movement making to benefit the sport of the amateur reinsman. In the new league rules defining an amateur there is evident lack of sympathy with the sentiment expressed by a majority of the leading reinsmen. The rule of this five-club organization provides that an amateur is one who has never driven or trained horses for hire, and that after March 1, 1901, an amateur may not drive against a professional. This whitewashes all those who have driven in races for a money purse against a professional. It must be a pleasing rule to some of the gentlemen who framed it, yet it does not satisfy those who are really earnest in their wish to place this sport on a square amateur basis.

There is room for considerable improvement in the state of amateur driving affairs, and clear, straight rules are needed; but the course of the new league will not bring about the desired change.

If there is any sport that may be called purely American, surely it is road driving; and the shame is greater, therefore, that now, at a time of its greatest prosperity, disruption in club ranks should come to postpone needed organization and reform. But it must be only a postponement; there is, of course, no reason why Boston, Chicago, Pittsburg, Cleveland and Cincinnati should not organize for their own benefit, if any is to be derived thereby; but there must be a real national league, membered by the representative clubs of the country, and working on strictly amateur lines.

If the Boston, Chicago, Pittsburg, Cleveland and Cincinnati gentlemen really seek only the good of the sport, they can prove it by abandoning their provincial attitude and joining the others in an effort for genuine national organization in the interest of the amateur reinsman.

Genuine
National
League
Wanted.

UNIVERSITY FOOTBALL

THE SEASON OF 1900 REVIEWED

THERE was a time when the big teams enjoyed a virtual monopoly of football science, but those days have gone for ever. Graduate players from Yale, Harvard and Princeton—and more recently from Pennsylvania also—have disseminated football knowledge from Maine to the Pacific, so much so that the face of the situation is wholly changed. This is one reason for the “surprises” of which the daily press has so much to say. Another explanation lies in the glorious uncertainty of any competitive sport in which *teams* of men rather than *individuals* take part, for there are, under those circumstances, many more and complex elements to be taken into account.

in point of technical skill—Yale in 1891, Princeton in 1896, Harvard in 1898—but for overwhelming physical strength to enforce first-class football knowledge, and an unusual degree of football brains, the laurel wreath goes to the Yale eleven of 1900. Under magnificent leadership and with the advantages of thorough coaching and the wisest training, her splendid material developed, at the proper time, info about the best football team on record. She has been building these three years on solid foundations for just the very results she obtained on November 17 and 24.

Another interesting feature of the year has been the continuation of the change in



F. G. BROWN, JR.
YALE.



T. T. HARE,
PENNSYLVANIA.



C. D. DALY,
HARVARD.

Every season in recent years has furnished its surprises—the present one no more than some which have preceded it.

THE season of 1900 had one distinguishing feature above all others since 1896. It settled beyond a doubt the unquestioned superiority of one team over all its rivals of the year. In 1896, Princeton's position was just as clearly established; in 1897, 1898 and 1899 the margins of difference were much less pronounced.

The Yale eleven is, with little question, the mightiest football combination ever formed. For physical prowess the previous record was held by Princeton's giant team of 1889, in which Janeway, Riggs, Cowan, George, Cash *et al.* figured. There have, perhaps, been more highly finished elevens

the conceptions of experts as regards the requirements of the several positions. Time was when there were unwritten, but none the less substantial, laws regarding the duties of each man. Ends, for example, had certain distinctive lines of work to perform, and their responsibilities were fixed and limited thereto. Messrs. Woodruff and Deland were the first experts to depart in important respects from these orthodox ideas, and gradually one leader after another has followed until football traditions of venerable age have become non-effective. Thus, we see guards tackling end runners, bulky center rushes first down the field on kicks, giant line men running with the ball, and everybody doing the kicking except the full-back. In the Pennsylvania-Cornell game the play which Pennsylvania

used at least half of the time was started like this: Seven men in the line, the tackles moved in to the guards' positions, the two half-backs playing tackle and the two guards in the backfield playing as half-backs, with a giant full-back (who did no kicking) in between. The idea was, of course, to get all the weight possible into the plays, and thus to increase their force and the difficulty of stopping them as they struck the line. This play alternated with the more familiar forms of the "guards back" of former seasons.

By far the cleverest adaptation of this principle was the one used by Yale, now generally known as "tackles back." The idea is not new. It was employed in cruder form years ago by Cowan (Princeton) and Waters (Harvard) among others. Last year Yale worked it occasionally, but it

anticipate the precise point of attack, much more so than in any system yet devised. Hence, the fearful gains around the Princeton and Harvard tackles. In another season this play will, doubtless, receive careful attention, and Yale is scarcely likely to outclass her rivals as she did this year.

The weight of the forwards as they faced each other was as follows:

Harvard	Yale	Princeton
158 lbs.	165 lbs.	146 lbs.
174 "	190 "	170 "
192 "	202 "	174 "
201 "	197 "	201 "
195 "	216 "	176 "
205 "	188 "	174 "
170 "	174 "	154 "
1295 lbs.	1332 lbs.	1195 lbs.

The Yale line outweighed the Harvard line by 37 lbs., an average of 5 2-7 lbs.; and



G. B. CHADWICK,
YALE.



W. L. BACHMAN,
LAFAYETTE.



W. M. FINCKE,
YALE.



G. S. STILLMAN,
YALE.

remained for Brown and McBride to make it a well-finished and thus far irresistible weapon of offense. It was more successful this year than it should be again, for two reasons: First, because it had the advantage of being quite new to its opponents; second, because Yale's powerful line could give it plenty of time to gather full headway and also have ready for the runner holes big enough for the laying of asphalt pavements. The tackles alternate in going back to a point about midway between the quarter-back and the three backs, and a little to one side. At one time the tackle carries the ball, at another the full-back is the medium. An advance is made upon a given spot in the line, to which, of course, the opponents' defense is at once drawn. The pass is delayed and the ball sent to some other spot, where usually there is a clean opening ready. It is extremely difficult to

the Princeton line by 137 lbs., an average of nearly 20 lbs. *per capita*. Now, mere weight does not always mean strength, but in Yale's case this year it did, and prodigious strength, too. The forwards were six-footers, with one exception, lusty, stout-waisted, agile; indeed, one might without disrespect take slight liberties with their honorable title and call them (merely for purposes of illustration) the Whale Football Team. When they tackled, they tackled hard and sure; when they blocked, they were immovable; when they ran with the ball (every giant of them helping his brother), as well try to divert a herd of buffaloes. With that line Yale could do anything. Given either the Harvard or Princeton backs behind it, and the victories would have been no less decisive. In other words, to the line belongs the major part of the credit of Yale's success. They also

possessed speed unusual in men so large. To bring into use an overworked but most appropriate phrase, they unexpectedly "got the jump" on their opponents. In view of Harvard's signal success over Pennsylvania in this particular, the greater agility of the Yale forwards was rather to be wondered at, and many explanations have been offered. The excuse most frequently put forward is that of overtraining, but this is a conclusion which the facts do not in the least justify. Harvard, indeed, was not over, but undertrained. It broke training in a mild way after the Pennsylvania game, and while the substitutes were driven hard, the regulars were allowed considerable liberty in diet and recreation for nearly a week. They had three weeks in which to relax and come up again, but they failed to reach the necessary stage of physical fitness by November 24. On the other hand, Yale played three hard games on successive Saturdays, and was driven to the limit in between. Of course, Yale's natural physical capacity was greater, but that is only a matter of degree. The point is that the principle of hard, driving work, applied with discrimination, is undoubtedly the wiser one; and any falling off in the physical efficiency of the Harvard eleven may be traced to its period of relaxation.

Why, then, did not Harvard make a better showing than Princeton, instead of worse, when her work all season had been so much better? Surely her advocates had the right to expect more of her.

First. Because of *undertraining*; there had been too much let up between November 3 and 24.

Second. Because the element of strategy, as contained in the tackle-back play, could and did deceive for the moment the heavier and stronger Harvard forwards, just as it

had the lighter and weaker Princeton forwards. It was a situation in which neither weight nor strength would help materially. In nearly all criticisms the accounts have read "through Pell," "through Lawrence." It was not so much "through" as it was "around" these men—that is, they were not pushed back so often as they were drawn off, deceived, outwitted.

ANALYSIS OF PLAY.

	Yale-Princeton		Yale-Harvard	
Touch-downs.	5	0	4	0
Goals from touch-downs.	4	0	3	0
Goals from field.	0	1	1	0
Gains in rushing including running back kicks.	684	97	531	150
Fumbles.	6	2	3	4
Punts.	6	12	11	12
Gains from punts.	159 yds.	508 yds.	332 yds.	366 yds.
Average length of punts.	26.7 "	42.3 "	30.2 "	30.6 "

It must be clear even to a partisan that Harvard was outclassed; it is also the writer's belief that Harvard, as she played November 24, would still have beaten Pennsylvania as the latter played November 3.

Pennsylvania had one trump card—guards-back—on November 3. Hers was an unevenly developed team, with three first-class men, one or two fair ones and the rest of them weak. When Harvard covered their trump with a higher card they were gone. They did quite as well as Harvard would let them do. Subsequently, they improved greatly; but at the best they were not good enough for Harvard any more than the latter was for Yale. Next year Pennsylvania should teach her men the fundamentals, such as falling on the ball, handling kicks, etc. She will have neither Hare nor McCracken to cover a multitude of sins.



W. R. MORLEY,
COLUMBIA.



P. T. W. HALE,
YALE.



R. D. STARBUCK,
CORNELL.



L. WASHBURN,
BROWN.

WHILE disclaiming any indorsement of Columbia's methods of organization or the spirit of her play, on her record she ranks fourth. She came up fast after a bad start. Her defeat by Harvard (24 to 0) was, however, much more indicative of weakness than that by Pennsylvania (30 to 0), for in the latter case she ran counter to "guards-back" for the first time, and had no idea how to meet it. Indeed, she felt that as her objective points were Yale and Princeton, it would hardly pay her to spend much time in studying a special defence for that purpose. Her margin of superiority over Princeton was not great, and for a wonder the score (6 to 5) about reflects the difference between the teams. In total yards gained the two were nearly equal, the play being curiously divided. Princeton was kept on the strict

Lafayette and Cornell. Its schedule was poor, containing games with only two of the first or second class New England teams—Harvard and Dartmouth. Brown will not hold her place in college football through games with such small and unimportant teams as those which formed so large a part in her schedule. Why not meet Yale, Wesleyan and Williams? These added games would strengthen her position materially.

WESLEYAN and Williams were very erratic. Williams pulled into shape too early, and held Harvard and Columbia down in creditable style; but in her championship games the men were stale and enfeebled by injuries. As a consequence, although beating Amherst (16 to 5), Williams was overwhelmed by Wesleyan (0 to 35).



G. M. MATTIS,
PRINCETON.



C. E. WALLACE,
PENNSYLVANIA.



J. W. HALLOWELL,
HARVARD.



F. W. LOWE,
DARTMOUTH.

defensive in most of the first half, and Columbia was quite as severely put to the test in the second half.

Princeton, Lafayette and Cornell (there is no especial significance in this order of naming them) should be grouped. Princeton beat Lafayette 5 to 0, with the ball one yard from the latter's goal as the game ended. Cornell beat Princeton 12 to 0, and then Lafayette trounced Cornell 17 to 0. Lafayette's record, barring the Princeton game, is rather the best of the three: but, curiously, Brown men say that Princeton (5 to 17) was a harder proposition for them than Pennsylvania (0 to 12) had been.

Out of the poorest material Brown has had in several years Mr. Robinson, her graduate coach, developed a thoroughly representative eleven. It was well balanced, played hard and, except for the temporary slump occasioned by the Chicago trip, could probably have held its own with Princeton,

The latter team, in contrast, came into form very late. It was fairly outplayed and beaten by Trinity (0 to 5), but subsequently defeated Williams, Amherst and Dartmouth handsomely.

All of the smaller New England colleges in this group had to build almost new lines this autumn, and no team among them made greater relative progress than Amherst. Although beaten in the games for which she cared most, her team was decidedly better than last year's.

Plucky Trinity (with only about one hundred and thirty students in all) made a good fight and beat Wesleyan, and that feat alone made her season a success. She also held Yale down well, and tied Amherst.

Lehigh, Dickinson, Bucknell, Pennsylvania State, and Washington and Jefferson kept football lively in the smaller Pennsylvania colleges. Each team played some good and some poor football. Lehigh scored on

Princeton and Pennsylvania; Dickinson caught Lafayette on the down grade and nearly beat her (6 to 10); Washington and Jefferson scored on Cornell (5 to 15) and held the Indians to a tie. Bucknell played a professional full-back (Matthewson) and thereby marred a good record. State tied West Point (0 to 0), scored on Pennsylvania (5 to 17), but was crushed by Princeton (0 to 26) and the Naval Academy (0 to 44).

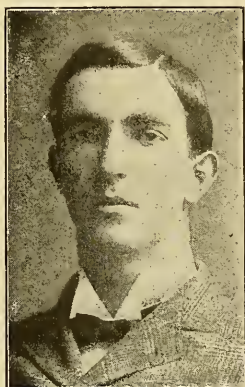
The Carlisle Indians, minus the services of several former stars, turned out very uneven football. They played well against Harvard (5 to 17) and Pennsylvania (6 to 16); were smothered by Yale (0 to 35), and did poorly against most of the other

badly, and the element of uncertainty thus introduced, together with the prolonged kicking duel in the second half, made the game the most spectacular of the season.

The Navy knew more football than its predecessor of 1899; but even then it was just barely good enough to win, and the Army team was good enough to push it to the limit before it did win. First, a field goal for the Army, then another for the Navy; next, a touch-down (and goal) for the Navy, from a well-executed fake pass on right tackle and a swift plunge through center; and, finally, a safety for the Army, when Belknap, being hurried, kicked into his own forwards, and Long fell on the ball over the Navy's goal line. This, briefly, is



A. H. SHARPE,
YALE.



A. J. INGLIS,
WESLEYAN.



H. P. OLCOTT,
YALE.

teams they faced. They seemed to lack the stamina for an uphill fight against odds.

ANNAPOLIS, 11; WEST POINT, 7.

THE Navy team seemed a little the lighter. Its line men were quicker than its backs. The forwards were also faster than their opponents from West Point; hence, the small gains of the Army through the line until the middle of the second half, when the Navy tired under the constant strain of handling bigger men. Their charge then lost some of its speed, and the West Point gains were greater. But if the Navy defense was stronger in handling rushes, it was much weaker in its formation on kicks. Long, the Navy quarter-back, made eight tries for field goals, four of which were blocked. Two of Belknap's punts were also blocked. The Navy was fortunate not to lose the game through this weakness. Its men were well coached in following and falling on the ball, in both of which particulars they decidedly excelled the Army. They also rushed the ball better, and Belknap's punting was excellent. Both teams fumbled

the record of the game, which shows invariably the true spirit of sportsmanship—the most gratifying game of the year always.

Annapolis would rank ninth among Eastern teams, following Brown; West Point would be tenth, with Hamilton and Wesleyan eleventh and twelfth.

ALL-AMERICA TEAM FOR 1900.

Starbuck (Cornell), full-back.

Chadwick (Yale) and Morley (Columbia), half-backs.

Daly (Harvard), quarter.

Bachman (Lafayette), center.

Brown (Yale), captain; and Hare (Pennsylvania), guards.

Stillman, G. S. (Yale), and Hale (Yale), tackles.

Hallowell (Harvard) and Smith, W. D. (West Point), ends.

SUBSTITUTES.

In the Line.

Dodds, S. (Wesleyan), Nichols (Annapolis), Bloomer (Yale), Lawrence (Harvard), Trout (Lafayette), Wright (Columbia) and Olcott (Yale).

Back of the Line.

Fincke, W. M. (Yale), Sawin (Harvard), Kendall (Harvard), Inglis (Wesleyan).

Gordon Brown is rightfully captain, having shown qualities of leadership rarely equaled in college football. Hale is transferred to the line, because he is not the kicker we should have on our representative eleven: nor is there any other man on the team, if Hale plays full-back, who can kick up to the All-America standard. Hare, Daly, Hallowell or Morley may be relied upon for an average of from 30 to 35 yards per game; but that is not enough. In order, therefore, to retain the value of Hale's services we must displace Lawrence, of Harvard, who would otherwise get the place, and bring Starbuck into the game: strong, heavy, fairly fast, a good interferer, he also punts farther and more consistently than any full-back save Cure, of Lafayette, and Mattis, of Princeton.

ENDS. Hallowell is easily the best of the year, although he was not very effective against Pennsylvania, suffering from a severely sprained ankle. In the Yale game he was in fine fettle, preventing the running back of kicks, scenting every trick play that was destined for his end, repeatedly breaking up Yale's interference, and in several instances getting back of Yale's line and downing the runner for a loss. W. D. Smith, of West Point, is a fine example of what hard work and courageous application will do for a man. Two years ago, at the opening of the season, he was very weak, but has plugged away with determination until he has finally outstripped every end rush of the season, excepting Hallowell. He is quite as hard to get around as is the Harvard man, and but little short of him in going down on kicks. He easily wins his place. S. Dodds, of Wesleyan, was one of the prize ends of 1900. Muscular, wiry, sandy, experienced, hard to put out on end plays, fast in going down on punts, this

man is fully entitled to be among the substitutes.

Slocum has done great work for Brown this year, especially in getting down and tackling the catcher of punts. Nichols, of the Navy team, and Read, his running mate, have made as efficient a pair as have played together this year, being fast, strong, hard tacklers, and not easily drawn in. Gould and Coy responded wonderfully to the marked attention Yale coaches paid them. They were heavy but alert, and thoroughly better than any Yale ends have been for a number of seasons. Taussig and Cross did fine work for Cornell in the Princeton game, but have not shown to so great advantage in some of their other games.

O'Neill, of Williams, was one of the good ends of the year, especially in blocking; but Cullinan was so handicapped by injuries as not to be able to do himself full justice. Campbell, of Harvard, lost seventy-five per cent. of his efficiency of 1899. Against Pennsylvania, he stopped end plays pretty well, but was weak in going down on kicks. Against Yale, he was easily turned, and also failed to make most of his tackles when he did get down on punts.

Gearhart and Dornin (Lehigh) have played some beautiful ball, their alertness enabling Lehigh to take advantage of fumbles and score on Pennsylvania and Princeton. Princeton's ends are good, natural players, and Roper is very fast. O'Connor, Dartmouth, is a strong player.

TACKLES. Stillman, Lawrence, Bloomer and Wallace (Pennsylvania) were the best of the season. The first-named gets the place for the greatest all-round ability. Hale, the other choice, is far too full of first-class football to leave off the team, and can not wisely be used at full-back, because his kicking is much below All-America requirements. He has had plenty of experience in the line, both at tackle and center; and, under Yale's "tackles-back" system, could do his work quite as well at tackle.



GODFREY BRINLEY,
TRINITY.



FIELDING SIMMONS,
WILLIAMS.



F. B. GEARHART,
LEHIGH.

Lawrence is a sterling man in every respect—strong, quick in charging, hard to box and full of grit and endurance. He is also an unusually accurate goal kicker from placement. Bloomer is the most promising Freshman of the year. He is extremely fortunate in beginning his career under such circumstances. Weighing nearly two hundred pounds, much older than the average Freshman (he is twenty-two), playing on a peerless team and the medium of advance in so powerful a system of offense, his beginning is, indeed, auspicious. He has, however, a good deal of football yet to learn, and another year should improve him greatly. Wallace, 210 lbs., was one of the three first-class men on Pennsylvania's team. Like all of these tackles, excepting Lawrence, he is great at carrying the ball, keeping his feet strongly, and literally sweeping along with his tacklers. Sheehan and Keane, of Brown, have done some very creditable work, as have Alexander, of Cornell, Simmons, of Williams (who was probably the best tackle outside of Yale, Harvard and Pennsylvania), and Yarrow, of Wesleyan. Princeton's tackles, like her ends, were woefully in need of coaching, and one (Davis) was crippled and short of practice.

Morse was the strongest man in the Amherst line, and Chalmers contributed his full share to Lafayette's undoubted strength. Bunker and Farnsworth, of West Point, are men of good calibre, the former having the greater possibilities. Farnsworth is exceptionally strong in getting through to block kicks. Adams and Williams are the best tackles who have played for the Navy, the former, especially, being a thoroughly able player.

GUARDS. Easiest of all to select. Two such men as Hare and Brown, who all through their course have held the premier places among a score of splendid players. It is football history, nothing short of it! Their ability is too well known to require comment. Wright, of Columbia, a veteran from Williams, is a bull for strength and a horse for work. He can hold his own with any guard playing, but his tendency towards unnecessary roughness has been severely condemned by many teams.

Harvard's guards, as a pair, about equaled Boal and Burden. Neither man was as good as Boal, but each was better than Burden. Mills and Wright, of Princeton, did well, considering their lack of weight. Mills knows the game thoroughly, and would be first-class if he had the requisite strength. Teas, of Pennsylvania, worked hard, but was somewhat below the Pennsylvania standard; this was true also of Whittemore, of Brown. Melendy, the other Brown guard, put up a strong game, as did Trout and Ernst, of Lafayette. Trout is one of the best guards of the year. Williams had two good men in Huggins, a Freshman, and Cole.

Lowe, of Dartmouth, played very well against Yale and Brown, but a bad ankle

accounted for his poorer showing in some of the other games. Other good men were Warner, of Cornell, and Silliman and Pike, of Wesleyan. Beaghan (Lehigh) did stout defensive work, and ran well with the ball.

CENTER. Bachman, of Lafayette, easily outshone his opponents in every game. He is finely built, weighs 198 lbs., runs fast, snaps accurately, tackles hard and is all over the field in every play. Olcott is second choice. He filled his place well, but lacks the special qualities of usefulness, which distinguish Bachman. McCloskey (Pennsylvania), Sargent (Harvard), and Losey (Princeton), are about in a class. They are average centers, good, but not up to the best standards. Namack, of Cornell, came in rather late, but learned quickly and did fairly well. Wheeler, of Brown, beat out the excellent record of Chesbro, former center, and Kanter, when in shape, made a useful man for Williams.

Columbia's men from tackle to tackle were, with the exception of Wright, shifted so often that it is not easy to pass upon their records.

QUARTER-BACKS. Daly is too well known to require detailed discussion. He is all a quarter-back should be, one of the greatest who ever played. He did not shine in the Yale game, because he was crippled. Only a shade behind him is W. M. Fincke, of Yale, whose work in the big games could hardly have been surpassed. A fast sprinter, clear-headed, nervy, careful, he is good enough for any team. His cousin, Rex Fincke (Harvard), is also one of the best of the season's quarter-backs. He more than filled Daly's place as the latter played it in the Yale game, and kept life in the entire team by his leadership and example. Clyde Dodds (Wesleyan) would come fourth on the list. He is an exceptional man—snappy, sure, persistent and of great strength and endurance. Meier (Princeton) was the best of the new quarters, with Brewster, of Cornell, next. Graves, of Pennsylvania, is a dashing man, and should be good in 1901; but his fumbling in the Harvard game, even before he was hurt, is against him this year. Wear, of Yale, is a splendid player, despite three bad fumbles on kicks in the Princeton game. He runs a team well, and is strong on interference and in dodging.

HALF-BACKS. Reiter (Princeton) is the equal of any half-back of the year; but as he could only play against Yale, is left out of the reckoning. Chadwick and Morley are neither of them showy players, but they are as good as could be found. The praise accorded their respective running mates was in large measure due them, for their skill in interference, etc., made possible most of the brilliant work of the other runners. Chadwick runs low, extremely hard and keeps his feet. The same is true of Morley, who has hardly been stopped without gain this year. Weekes (Columbia) is the Laurie Bliss of 1900, which means that to some personal excellence may be added an even

greater debt to the helpers who have put out the opposing ends for him, blocked off would-be tacklers or made big holes for his advances. Sharpe (Yale) is a stronger defensive than offensive player. He runs high and awkwardly, and was not hard to stop behind Yale's 1899 line. Her stronger team this year enabled him to make a better showing than his actual form warranted. Kendall and Sawin (Harvard) are every inch varsity men. They are compact of build, fleet of foot, well seasoned, ground-gainers, both hard to stop. Sawin fights himself all out before the end of a big game, but Kendall has greater strength, and can last it through. Morrison (Cornell), Casad and Clark (West Point), Fowler and Manley (Annapolis), Barry (Brown), Potter (Pennsylvania), Brinley (Trinity), and Corscaden (Wesleyan), have all done superior work, and deserve more credit than the writer has space to give them. Washburn, of Brown, is always a valuable man, although his work did fall a little by reason of the captaincy. Launt (Lafayette) and Shay (Amherst) were, perhaps, the best of the new half-backs, and Fairbaugh (Lehigh) did some excellent work.

FULL-BACKS. On the leading teams there were but two genuine full-backs of the traditional stamp—namely, Starbuck (Cornell) and Mattis (Princeton). (Cure [Lafayette], who in some respects was the best of all, is not considered, because ineligible.) The others were chiefly forwards hauled back from the line: big, fast fellows, who kept their feet indefinitely and simply would not be brought down. McCracken (190 lbs.) (a grand player, who is not placed, because really ineligible), Hale (188 lbs.) and Ellis (192 lbs.) were all of this type; terrible in line hitting, but no one of them a good punter.

Starbuck was the best all-round full-back, and Inglis, of Wesleyan, next. They are both strong and accurate punters, interfere with certainty and force and back up the line safely. Mattis is the longest punter and a valuable man save on interference. Ellis, since his hurdling plays have been successfully met, has lost some of his effectiveness, though he is always a good man for hard, short plunges. Hale has already been discussed. Dolph (Williams), Bates, (Brown), Townsend (Trinity), and Phillips (West Point) were about in a class, and did good work as occasion offered.

CHARLES E. PATTERSON.

IN THE MIDDLE WEST.

THE present season has witnessed a decided advance in the standard of football in the middle West. Not only have the defensive tactics of the Western teams been of an unusually high order, but in offensive also marked improvement has been shown. It is interesting to note, too, the effect which Eastern coaches have had upon the game in the West. Three distinct types of football, based upon the systems followed at

Princeton, at Yale and at Pennsylvania, can be easily recognized, Harvard as yet having had very little influence. King, at Wisconsin; Lea, at Michigan; Holt and Smith, at Illinois, and Booth, at Nebraska, have developed in these universities types of football patterned almost precisely after that of their *almae matres*. The Princeton defense has been somewhat modified by both King and Booth, but in the attack all adhere closely to open style of game, with seven men on the rush line and three backs in line behind the quarter. At Iowa, Knipe has developed a powerful and versatile style of play by combining the well-known "guards back" of Pennsylvania with the open "straight football" of Princeton. Hollister, at Northwestern, influenced somewhat by the style of play with which he was familiar while at Pennsylvania, has evolved an original system of attack, which is now known as the "Northwestern tandem." While the defense of the Northwestern team, patterned closely after that of Pennsylvania, has been uniformly strong, very little can be said in favor of Hollister's system of attack when judged by its results against teams which he has encountered.

The "tandem formation," briefly stated, consists in keeping the five centre men in their accustomed places in the line, dropping the ends back about one and a half yards from the line while still remaining slightly outside the tackles, and in placing the three backs in tandem formation, hands upon one another, directly behind the quarter-back. From this formation plays are directed with great force at any point in the line or around either end.

The one defect in the whole system seems to be that the "tandem" necessarily starts from so far behind the line that opponents are enabled to break through and meet it before the line is reached.

AT the University of Minnesota, Dr. Williams has inaugurated a system of attack entirely new in the West, and which he has been developing for some years at the Penn Charter School in Philadelphia. In this the old Yale football has been abandoned, and in its place formation plays, consisting of tackle-back, tackle over, tackle and end over, in various combinations, have been exclusively adopted. This style admits either of a close or open game, and Minnesota has certainly used it this year with phenomenal success.

Stagg, at Chicago, has adhered closely to the old style Yale formation, which differs from that of Princeton only in that the ends are dropped back and outside the tackles instead of being retained in the line.

The less prominent teams in Western football—Purdue, Grinnell, Beloit, Ohio State University, Knox, Notre Dame, Ames, and others play a style of game differing but slightly from the old open game of Yale and Princeton.

The question of Western championship and the relative standing of the various

teams in the running is always of interest at the season's close. Unfortunately, no final game for the undisputed championship of the middle West, as in the fall of 1899, was possible this year, and the standing of the leaders must be reached by a consideration of their individual records. The fallacy of taking the actual number of points scored as an index of the relative strength of various teams has often been demonstrated, but a careful analysis of important games leads to very accurate conclusions.

MINNESOTA, Wisconsin and Iowa can at once be assigned to the first class without question, and with no near competitors. Iowa's claim to a place in this class rests entirely upon the record of her scores against teams of the second class, as she has played neither Minnesota nor Wisconsin. Neither Minnesota nor Iowa has been defeated, while the only game lost by Wisconsin was to Minnesota by the close score of 5 to 6. This game, played upon the 3d of November, and fairly and deservedly won by Minnesota, clearly establishes her title to superiority over Wisconsin.

An analysis of this game shows that in securing her touch-down Wisconsin obtained the ball 82 yards from Minnesota's goal; then, by 32 yards' advance, made by rushes, and 40 yards granted for Minnesota's off-

side play, carried the ball to Minnesota's 12-yard line, when they were held and thrown for a loss. Here, on the third down, with 8 yards to gain, Wisconsin executed a quarter-back kick, which sent the ball across the goal line near the corner. Dobie, playing full-back for Minnesota, fumbled the ball, and Cochems, of Wisconsin, fell on it, securing a touch-down, from which a difficult goal was missed. Minnesota's score, on the other hand, was secured by carrying the ball straight up the field for 62 yards, aided by a penalty of 10 yards, and planting the ball between the goal posts for a touch-down, followed by an easy goal. During the entire game, in rushes Minnesota advanced the ball 310 yards; Wisconsin, 212. Minnesota's kicks aggregated 313 yards; those of Wisconsin, 318. Wisconsin's claim to first place is thus effectually disposed of.

IN considering the relative strength of Iowa and Minnesota, the games played by these institutions against Chicago and Northwestern furnish the standard of comparison. The Minnesota-Chicago game, played upon the second Saturday in October, although resulting in a tie score of 6 to 6, was a virtual victory for Minnesota. Three weeks later, after Chicago had encountered and gone down before both Brown

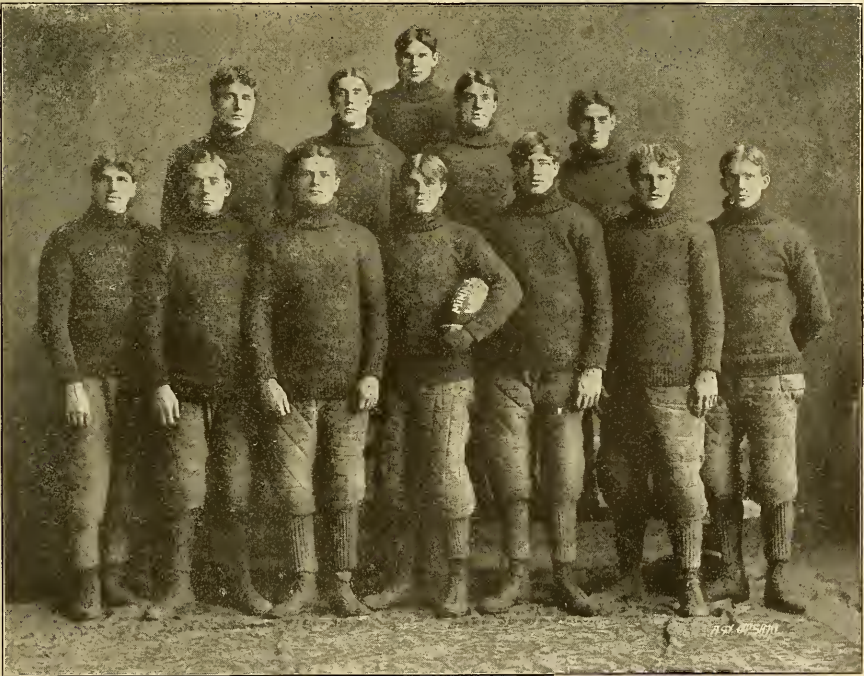


Photo by A. H. Opsahl, Minneapolis, Minn.

				Dobie			
	Smith		L. Faus	Knowlton	Van Valkenberg		
Hoyt	Twiet	Mueller	Page	Flynn	Fee		Rune

THE MINNESOTA TEAM.

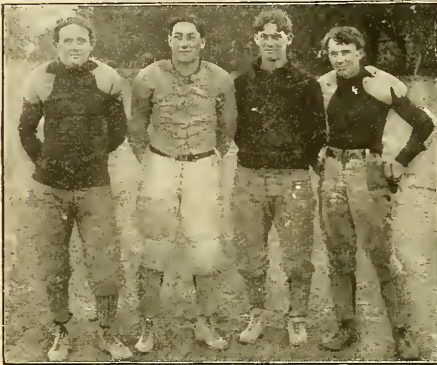


Brockway Ely Little
CENTER TRIO.



Watters Burrier Warner Eby
ENDS AND TACKLES.

IOWA FOOTBALL TEAM, 1900



Griffith Morton Williams Edson
BACKFIELD.

and Pennsylvania, Iowa met and defeated her by a score of 17 to 0. During the first half this game was played upon even terms, neither side scoring; but in the second half Chicago went to pieces, and Iowa had all her own way. On the following Saturday, November 10, Northwestern succeeded in defeating Chicago, 5 to 0, after a hard, close game, in which the two teams seemed about equally matched. One week later, November 17, fresh from their victory over Chicago, Northwestern met Minnesota, and was defeated by 0 to 21 in a game which was cut short twelve minutes on account of darkness, and Northwestern entirely out-classed. Iowa's game with Northwestern upon Thanksgiving Day at once became of importance in determining Iowa's rating. The game resulted in a tie score of 5 to 5, Iowa scarcely holding her own. Iowa's score of 28 to 5 against Michigan in the week following her game with Chicago has become of less importance in the light of Michigan's games with Notre Dame, Ohio State University and Chicago. On November 10 Wisconsin overwhelmed Notre Dame by a score of 64 to 0. On November 17

Michigan could score but 7 points against Notre Dame, while on the following Saturday, in the game against Ohio State University neither side could score.

On Thanksgiving day Chicago, defeated alike by Northwestern and Iowa, secured a decisive and well-earned victory of 15 to 5 over Michigan; on this same day, too, Minnesota won by 20 to 12 from Nebraska, a team which had made a clean sweep of the Southwest, and up to that day had not been scored on.

A CAREFUL and impartial consideration of these facts would, therefore, seem to show clearly that to Minnesota the first place should unquestionably be accorded.

Wisconsin's overwhelming defeat of Chicago by a score of 39 to 5 on November 17, and her exceedingly close game with Minnesota, would indicate her probable superiority over Iowa.

The tie game which Iowa played with Northwestern when at the acme of her course of training has greatly lessened her rating. Wisconsin defeated Illinois by 27 to 0, and the Illinois *v.* Northwestern game resulted in a tie, in which neither side scored.

It would seem, therefore, that the football teams of the middle West, as a result of their work during the present season, should be rated in the following order:

Minnesota, Wisconsin, Iowa, Northwestern, Chicago, Nebraska, Michigan and Illinois, the remainder being in a class the grading of which is difficult and not important, although Indiana and Ohio are entitled to mention for their excellent record.

Nov. 17th.—Michigan, 7; Notre Dame, 0.
Minnesota, 21; Northwestern, 0.
Nov. 24th.—Michigan, 0; Ohio, 0.
Wisconsin, 39; Chicago, 5.
Minnesota, 21; Northwestern, 0.
Nov. 29th.—Iowa, 5; Northwestern, 5.
Wisconsin, 27; Illinois, 0.
Chicago, 15; Michigan, 6.
Stanford, 5; California, 0.

Southern and Pacific coast and scholastic football will be reviewed next month.

FOOTBALL SEASON OF 1900.

FOOTBALL SEASON OF 1900.																								GAMES.				POINTS.	
Yale.	Harvard.	Pennsylvania.	Columbia.	Princeton.	Lafayette.	Cornell.	Brown.	Annapolis.	West Point.	Indians.	Wesleyan.	Dartmouth.	Williams.	Tribity.	Amherst.	Dickinson.	Lehigh.	Wash. and Jeff.	Bucknell.	Penna. State.	Won.	Drawn.	Lost.	Total.	Won.	Lost.			
—	28	..	12	29	..	..	..	..	18	35	38	17	..	22	27	..	..	..	..	..	..	9	0	0	9	226	10		
Harvard.....	0	—	17	24	..	..	11	..	29	17	24	..	12	..	18	..	..	..	..	..	..	8	0	1	9	152	44		
Pennsylvania.....	..	5	—	30	..	12	27	12	28	..	16	..	..	..	..	35	27	..	..	17	17	9	0	1	10	209	45		
Columbia.....	5	0	0	—	6	..	..	..	11	..	17	12	..	0	..	..	..	..	..	..	..	4	1	3	8	51	77		
Princeton.....	5	..	5	—	5	0	17	5	..	..	..	..	..	..	..	..	12	..	..	26	26	5	0	3	8	75	57		
Lafayette.....	..	..	5	..	0	—	17	..	..	..	..	..	..	..	..	10	*32	..	..	..	..	4	0	2	6	84	23		
Cornell.....	..	..	0	..	12	0	—	..	..	..	..	23	..	..	..	..	..	16	6	..	..	4	0	2	6	57	55		
Brown.....	..	6	0	..	5	..	—	..	..	..	..	12	..	..	..	..	..	..	..	..	..	1	0	3	4	23	43		
Annapolis.....	..	..	6	0	0	..	..	—	11	..	..	..	..	..	..	..	15	18	..	44	44	4	0	3	7	94	51		
West Point.....	0	0	..	..	..	..	..	7	—	..	..	..	6	28	..	..	..	..	18	0	0	3	1	3	7	59	68		
Indians.....	0	5	0	6	..	..	..	..	..	—	..	..	..	..	..	21	..	5	..	..	..	1	1	4	6	43	90		
Wesleyan.....	0	0	..	0	..	..	..	..	..	..	..	16	35	0	17	..	..	..	..	..	..	3	0	4	7	68	84		
Dartmouth.....	0	..	..	..	..	..	6	5	..	..	5	—	..	..	..	..	..	..	..	..	..	0	0	4	4	16	68		
Williams.....	..	0	0	..	..	..	..	..	0	..	0	..	..	..	..	16	..	..	..	..	..	1	1	3	5	16	58		
Trinity.....	0	..	..	..	..	..	..	..	0	..	5	..	..	—	0	..	..	..	..	..	..	1	1	2	4	5	50		
Amherst.....	0	0	..	..	..	..	..	..	..	..	0	..	5	0	—	..	..	..	..	..	..	0	1	4	5	5	78		
Dickinson.....	..	..	0	..	..	6	..	..	..	0	..	..	..	..	..	—	..	..	..	18	18	1	0	3	4	24	66		
Lehigh.....	..	..	6	..	5	*6	..	0	..	..	..	..	..	..	..	..	—	..	12	..	..	1	0	5	6	23	112		
Washington and Jefferson.....	..	..	..	..	..	..	5	0	..	5	..	..	..	..	..	..	..	—	..	..	..	0	1	2	3	10	39		
Bucknell.....	..	..	..	..	..	..	0	..	10	..	..	..	..	..	..	..	6	...	—	10	10	0	0	4	4	16	42		
Pennsylvania State.....	..	..	5	..	0	..	..	..	0	..	..	..	..	..	..	..	..	..	16	—	..	1	1	4	6	11	105		
	10	44	45	77	57	23	55	45	51	68	90	84	68	58	50	78	66	112	39	42	105	60	8	60	64	1267	1267		

* Two games ; 34-0, 18-0. † Forfeited.

THE NATIONAL HORSE SHOW

ANOTHER National Horse Show has passed into history, and proved in many ways the most successful of the series. Financially, the receipts were enormous, the profits heavy; socially, the attendance was large on most days, but of a more than usually democratic type, the "box display" being by no means up to the standard of previous years.

From a horseman's point of view, there was in the competitions a surfeit of quantity, though a rather marked absence of superlative quality; but the presence of new material of sufficient merit to contest, in many cases successfully, with the battle-worn veterans furnishes matter for much gratifying comment, and proves that, sadly as the country is depleted of desirable animals, there are still a few left which are able to hold their own in any arena.

Especially was this noticeable in the heavy-harness championship class for horses over 15: 2, where Mr. G. A. Saportas's black mare, Lady Algy, defeated a very strong field.

The ribbon for the smaller class went to that well-known veteran Mr. H. C. Hoskier's chestnut gelding Lord Brilliant; the larger pair class was captured by Mr. J. E. Widener's brown gelding Gabrael, and brown gelding Richmond; the Hoskier pair of chestnut geldings, Lord Brilliant and Lord Golden, being awarded the blue in the smaller class.

The championship in the small saddle class went to Mr. H. E. Peters's black mare, Lady Leona, very skilfully shown earlier in the week by Mrs. W. H. Thompson, the "over 15: 2" ribbon being borne off by Mr. L. Hitchcock's bay mare, Dowager, a double winner during the week over many horses much better than herself. This award caused unpleasant comment.

The hunting championships went to Messrs. Hart Brothers' roan gelding, Richmond, Gedney Farm's brown gelding, Heatherbloom, and Arden Farm's Sun Dance, respectively, in the heavy, middle and light weights.

Among the trotters and road horses, Mr. J. F. Gibson's bay mare, Rosola, won the single class, and Mr. J. W. Cooke's bay gelding Altomont, and bay gelding Wilkie Patchen the double.

BRIEFLY reviewed, the breeding classes may be characterized as strikingly below what one would expect at a national show; and it is much to be deplored, for their own sake, that breeders do not make efforts to insure proper and plentiful representation at this exhibition, where, of all others, foreigners form their opinions of our horses by what they see them do at work and by the inspection of the animals exhibited as typical progenitors. The quality was good in spots, however.

The most noticeable falling off in all respects was in the hackney classes; and when one remembers the impressive displays of

former years, one can but marvel at the present indifference shown by the promoters of this type. One wonders what has become of all those stalwart, big-boned sires and deep, wide, finely turned mares and youngsters which used to parade so proudly, and since have been lost to view. If any animal could justly exclaim, "Deliver me from my friends!" it is surely this horse—always misplaced, and absurdly overpraised.

The trotting breeding classes were only fair, except in one of the colt classes, which contained some very fine specimens of what intelligent effort and shrewd judgment will produce when systematically continued and followed up.

The thoroughbred stallion class was, as usual, a fizzle, and contained nothing of proven merit as a sire, although the winner was a fine big horse, full of quality, and a type.

The Whitney prize produced a nondescript field of trotters, French coachers and thoroughbreds. It was noticeable only for the absence of the best animals we have of these breeds. The winner was hardly the sort any one would care to use as a sire, and yet he was probably the best of the mixed lot paraded. To prove anything, entries for such a prize should be accompanied by three or four of their get. Like does not necessarily produce like in horse-breeding.

The French coachers were, as always, below average merit; and in no year but one (when *Indre* and *Perfection* were shown, although the former is a French trotter) has this variety been properly represented. The small ponies were capital, and the larger pony stallion class, headed by *Dilham Prime Minister*, was excellent.

THE heavy-harness classes were swamped with entries, and the judges were necessarily much hurried in their work, which, by the way, gave general satisfaction. While the majority of the ribbons went to veterans, a few fresh animals received deserved recognition, and defeated old winners. The general inference was that we are still action mad, and everything else is subordinate to that accomplishment. Nowhere in the world have finer all-round goers been seen than at the Garden last month; but nowhere, also, has more faulty conformation and gait been allowed to receive the honor of the various-colored ribbons. Many of the horses in the awards were conspicuous for the trotting-bred horse's chief shortcomings—shallow girth, slack loin, light back-ribs, light bone, wide action behind and "dishing," or wide action, before. Will the time ever come when the sturdy, level-made, true-actioned, even goer meets official recognition? when "hysteries" are rated at their true value—as for park classes only? The "manners" displayed throughout were wonderfully good, and no such collection of well-behaved, thoroughly trained horses has ever been seen in this country.

The appointment classes were very fine.

They betrayed an anxious attention to detail and the eternal fitness of things, which must have proved a delight to those of us who cherish ambitions to appear in what is arbitrarily designated as "proper form." Nothing finer or more perfect in make, shape and finish can be conceived than the equipages and equipments, and the aggregate expense of such vehicles, etc., is enormous. The four-in-hand and tandem classes were especially good, and probably, as a whole, these divisions were never stronger.

Ponies in harness were high class, and wonderful, indeed, is the progress made in producing and developing these usable and useful little beasts.

The pacing and roadster classes were superb all through.

THE saddle horses were poor in average quality, although the pony classes were here again superb in all the heights. The decisions of the judge could not be intelligently followed, and his awards in many cases were vigorously objected to. Certainly, the "turning down" of some of the rejected animals was incomprehensible on any line of reasoning. Manners were again noticeably excellent throughout, and the improvement made in handling and in equestrianism is each year more apparent.

It may be said here that in these classes, as in several others, the veterinary surgeons present in the ring were either not consulted, their verdict was disregarded, or their judgment was very lenient, for a number of ribbon winners (some of them blues and one a championship) were distinctly lame; and while the legend of "practical soundness" may excuse a multitude of shortcomings in that respect, it should not qualify lame or sore horses. If so, the veterinary inspection becomes a farce of the most laughable kind. Wind, also, should be most carefully examined: and there is no better place to listen than on any of the turns where the average driver or rider takes his horse back a little for the "parade" down the straight sides past the judges.

The cavalry classes were good, but knowing spectators were lost in amazement to see the judge awarding ribbons to docked animals. It is well known that no horse will be accepted thus mutilated. I observed, too, that none were required to be ridden with one hand or made to "side step" or "passage"—absolutely essential accomplishments for military work. Restrictions as to sex also are iron-clad so far as army contracts go; and surely mares and stallions, as in this and other years, should not be recognized. These cavalry (and artillery) classes are most practical if properly administered, and they should be promoted by the management of every show in the land; but Governmental requirements, or those of foreign army buyers, must be exactly complied with.

It is strange that our polo players will not enter their ponies in shows anywhere.

Even at Newport, the fountain-head of the game, it has been found necessary to abandon such classes, although at show time there are probably two hundred polo ponies in the city. The entries in the Garden were good and tried performers, though few in number.

In a large show like the National it is odd that the draft horse is not recognized. Nothing was more interesting and instructive at the Chicago Show than these classes; and while breeding divisions would hardly fill here, exhibitions of the animals in use for heavy draught in this city should prove interesting and picturesque.

ASIDE from the Whitney Prize, the four-in-hand driving competition, which attracted a mixed amateur and professional field, was the only "special" calling for mention; and it attracted the largest morning crowd ever seen at the show. Such competitions are praiseworthy, but they would probably be more attractive if the two classes of drivers were separated, or the "pros" obliged to remain in one class while amateurs might compete against them in it, as well as in their own division.

Special consideration should surely be given the rising generation of gentleman whips, and they should be encouraged in every way, even if old hands have to be turned down.

With two or three recognized coaching clubs in America, it is absurd to find in a park class, where "owner or member of coaching club" must drive, that in a field of four two teams had to be driven by one man.

The result of the Hyde Cup proves that our men are not up to the standard of first-class professional work, although, of course, ring driving is largely a trick performance, and Howlett beat them all, hands down.

THE lessons of the show are many, and will suggest themselves to the most careless observer. One innovation which is becoming sorely needed is the founding of a National American Heavy-Harness Horse Breeders' Register (or Association), whereby the breeders of these animals may receive the recognition due their efforts, the horses themselves be readily identified, false pedigrees detected and the heavy-harness horse established upon lines of personal merit alone. Such qualities, and not certain blood lines, should alone render stallions and mares eligible; and every animal should stand upon its own bottom as an individual, and not because it happened to be by This out of That.

Trotter, hackney, thoroughbred, coacher, and so forth would all meet upon common lines of personal excellence, and upon that only. The different Societies now extant (and some which are virtually extinct) should all co-operate in such an enterprise.

F. M. WARE.

GOLF

THERE is an uneasy feeling on the part of Old-World golfers that our American exaggeration of certain aspects of the game may change many of the old-fashioned pleasures and customs. Even the staid *Blackwood's Magazine*, whose editors and subalterns have played golf now for a century, comes out with a protest. Other British journals have followed with comments of the same character. The Bogey superstition receives a humorous rebuke at St. Andrews, according to one of these writers. "What's Bogey score for this hole?" a player asks of his caddie after a depressing experience of the long fifth hole at St. Andrews. "Bogey doesna play gowff here," was the answer. "But what *would* he take?" persisted the questioner. "Weel, sir, it would greatly depend upon wha he was playin'. If he was playin' against anither Bogle, it would be a d—d fine match to see!"

We have no wish to balk at innovations that are of proved value; on the other hand, it must be kept in mind that each game has a spirit and a history of its own, and to destroy these is to make any and all games monotonous. The charm of whist is that two must play together as one; the charm of poker, to many men, is that each plays for his own hand against all the other robbers. A foursome at golf was for many years, and is still in the old home of the game, considered to be the most enjoyable and most sportsmanlike form of the game. Here, on the other hand, it is practically impossible on most courses to make up such a game. Each man prefers to play his own game unhelped or unhindered, as the case may be, by a partner. The sociability and certainly some of the refinements of the game as played in the olden time are thus lost.

IN place of the milder and wholesomer game, good for old and young alike, and tempting the physically lazy into the open air for an innocently exciting competition, we have these endless tournaments. Mugs, mugs everywhere, and not a drop of the old-time sociability and friendly rivalry. Beginning in the spring and lasting, as we travel to Florida with the sun, until March, it is a pity if every man is not a champion or a record-breaker who wields a club. His must be a lonely sideboard, indeed, that has not a trophy of some kind picked up among the hills of Connecticut, the marshes of the New England coast or the sands of Florida. Like the prizes in the children's pony class at country horse-shows, each child must have some kind of a ribbon. So, either against Bogey, or with an overwhelming handicap, or by some subtler arrangement with the Green's Committee, every man—or baby, shall we say?—gets a golfing toy. But all this is not golf at all; on the contrary, it is, whether consciously or unconsciously, merely a chorus of, to quote that estimable politician Colonel Gardiner, "to H-ll with golf!" As a war-cry for Tam-

many, with "Reform" instead of "Golf," this was excellent, being most appropriate rhetorically and ethically; but we should be rather ashamed than otherwise to see golf thus pushed on one side, real golf that is! There are all sorts of beautiful games for those who merely wish to gamble, or for those who wish to see themselves in the newspaper:

A cap upon my forehead,
A mug within my hand.

BUT, it is replied by men who manage the finances of certain golf clubs, we must offer inducements, or men will not join, men will not play, men will not pay. Then, by all means, let us have fewer courses, and those kept up by men with the real spirit of the thing in them—men who are playing not for money, nor notoriety, nor for excitement, but for rest and change to enable them to do better the more important tasks of life.

It is rumored that we are to have next a professional league. This, I hope, will be nipped in the bud. I prophesy here and now that if the professional golfers form a league, that in two years the professional golfer will be an affair of the past. That is organization along the wrong lines, and will prove futile and disastrous to the organizers.

I am sorry to hear that Mr. Thomas is to resign. It will be no easy task to fill his place, and we must have a care in doing so to elect a man acceptable to the West as well as to the East. Distances are so great in our country that it is difficult as it is to support a central organization which shall be acceptable and efficient to all concerned. It is apt to be the case in these matters that the busy men are too busy and the idle men too idle to undertake such a position: but, no doubt, when the time comes an idle man who knows how to be busy will be found.

Mr. Travis continues to win, and has again beaten Douglas, and proven himself to be a champion, not by accident, but by continued and consistent superiority.

Now that the active season in the North has closed, Greens committees should not think their duties at an end until playing time shall come round again. Apropos of which it is opportune to remind them that good greens next summer means work this winter and spring, especially after the break-up of every frost; and there may be several. The moment when the soil yields to the warmth is the time to begin to pack it down level, lest sunny days steal round and harden the upheavals. A good implement for this purpose is what is used on the cricket fields of England, and known as a "mumper." It is a flat block of heavy wood, about 18 inches long by 12 wide and 4 or 5 inches thick, with a handle inserted at an angle of about forty-five degrees. Liberally applied to beat down the greens, it will do the work better than the roller.

PRICE COLLIER.

PHOTOGRAPHY



PHOTOGRAPHY has, at different periods since its discovery, been regarded as a curiosity, as a joke, as an amusement and as a fad. To-day, at any rate, it has achieved the position of one of the most universally useful arts known to man; and to millions it has become almost one of the necessities of life. Nor is the end yet. Every day we hear of some advance in the art, of some new use to which it may be applied. There seems to be absolutely no limit to the power of light. Moving at a speed compared with which that of lightning is snail-like, there is no space of time so short in which it could not delineate a picture of the universe were there but provided the necessary medium on which to depict it. Mr. Decombe, of the Paris Academy of Sciences, has taken photographs in an exposure of less than the five-millionth part of a second; and I doubt not that in a few years this record will simply be regarded as "pretty good for that period."

John Baynes, of Stamford, Conn., has invented a new and wonderful method whereby the most delicately graded bas-relief sculpture can be modelled by means of photography; and he believes that eventually heroic statues, beside which the work of hammer and chisel will look crude, may be produced by the action of light alone. The illustration shown herewith, a portrait of the inventor himself, represents the first exhibited piece of sculpture done by this new method; but it does not in any way illustrate the whole capability of the process. This specimen was made the exact size of a United States silver dollar, so that the modelling of the two might be compared.

AT the recent Paris Exposition the only exhibit accorded the honor of space in three separate departments was a photograph. It was the largest ever taken on a single plate, being eight feet long by four feet eight inches wide. The subject was the "Chicago & Alton Limited," among the handsomest trains in the world. This camera requires about fifteen men to handle it, weighs 1400 pounds and measures when extended 20 feet by 10 feet by 6 feet. It was made for the railroad company. It is fitted with a wide-angle lens, with a $5\frac{1}{2}$ -foot focus, and another, a rectilinear, with a 10-foot focus. It

is probably the largest camera in the world, and is carried about on a railroad flat-car.

By no class, perhaps, have the possibilities of photography been more thoroughly appreciated than by the out-of-door people. Civil engineers and surveyors, explorers, geographers, naturalists, astronomers, artists, tourists, and hosts of others who lead a more or less out-of-door life, find a valuable ally in the camera. But even were every one of these an artist, the pencil and the brush would not be able to keep pace with the needs now supplied by the camera. I was never so much impressed with this fact as when examining the Sella collection of photographs of mountain scenery, loaned to the Boston Public Library by the Appalachian Mountain Club. There were many beautiful and most instructive pictures, which could not have been produced with one-fourth the accuracy of detail in the lifetime of any artist; yet these in a comparatively short time had been rendered with absolute truth by the camera.

By means of telephotography, the photographer operator is now able to shoot at long range, and obtain detail of distant objects quite invisible in pictures taken with an ordinary lens. Telephotography has also been used in map-making; and cameras, attached to kites or balloons, and operated by electricity or by clockwork, are used in making topographical maps and the upper surfaces of clouds.

The description of almost any outdoor feature is instantly rendered more than doubly clear by a glance at a good photograph, especially when the subject under discussion is a new one to the person to whom it is described. Take, for example, a tree. One might write many pages to define its locality, situation, surroundings, habits, size, bark, branches, twigs and leaves; and, after all, a photograph, taken in an instant, will convey the whole information in a much more satisfactory manner. One man who is evidently aware of this is Mr. Gifford Pinchot, Forester of the United States Department of Agriculture at Washington. His bulletins are made much more valuable and interesting by the addition of excellent photographs.

As an aid to the study of nature, the camera is invaluable, and volumes might be written on recent photography in this field alone. Thanks to the splendid work of Frank M. Chapman and others in this country, the Kearsons in England and Professor Robert Collett, of Norway, we are able to sit at home at a table and study birds and beasts amid their natural surroundings and engaged in their daily occupations. These men no longer say to us that a tern alights upon her nest in such a way, or that kittiwakes build in such and such situations; they say, "Here is a tern alighting at her nest;" "here are kittiwakes nesting on the rocky headlands of Norway;" "these are startled rabbits."

ERNEST HAROLD BAYNES.

FORESTRY

Conducted by Gifford Pinchot

FORESTER OF THE UNITED STATES

THE great majority of intelligent citizens in the United States are to-day strongly impressed with the value and importance of forestry. This fact marks a very noteworthy change in public opinion, accomplished within the last ten years. Measured by the amount of space given to forest matters in the public prints, forestry has made most remarkable progress even within the last twelve months.

This interest has been brought about by a growing realization of the fact that the forests of the country are in a fair way—not, it is true, to disappear entirely—but to become so impoverished that they will no longer play their proper part in promoting the growth and prosperity of the nation. When we consider that the value of forest products stands next to that of agriculture, and that it exceeds that of all the mines in the country, that forest industries employ some half million men, and that in the last analysis most of the necessities and a very considerable part of the pleasures of life would be impossible, on our present plane of civilization, without the assistance of the forest, we get some conception of what the destruction of forests now in progress may lead to if it is not checked. When, in addition, it is realized that permanently prosperous agriculture is impossible in the United States without permanently prosperous forests, the forest question begins to assume its real importance.

LUMBERING AND FIRE.

LET us glance for a moment at the actual situation. In nearly every part of the United States where trees are cut for lumber the methods of lumbering are destructive—that is to say, the reproduction of the forest is hindered by the cutting rather than helped, as it should be: the value of the forest as a producer of wood is diminished, and in an enormously large proportion of cases fire follows the axe.

Fire plays the first part in forest destruction in the United States. In addition to the immense devastation of forests by fire which follows lumbering, every year fires run over hundreds of thousands of acres where lumbering has not gone. Over this whole great area young growth is injured or destroyed, and very often the old trees perish with it. Fires are especially destructive wherever the *débris* of a former forest, left by lumbering or by previous fires, still cumber ground covered by the young trees of a new growth. Young growth in such situations is simply doomed; and, with the recurring fires, decade after decade of useful growth goes for nothing.

TAXATION.

ANOTHER most serious danger to the forest lies in the premium set upon forest destruction by the distribution of taxes in certain parts of the country. In many forest regions, taxes on cut-over lands are nominal, while

the taxes on lands covered with merchantable timber are exceedingly heavy. Instances where the annual tax upon standing timber is not less than six per cent. of the market value of the stumpage are not unknown, and slightly lower rates are common. The effect of this is often to make it utterly impracticable for owners of timber lands to hold them as forests beyond the first moment when their timber can profitably be cut off. Under such conditions conservative lumbering, which is forestry, becomes impossible.

This is the dark side of the picture. There are, on the other hand, many forces whose tendency is to preserve and perpetuate the forest. Their existence, however, does not in any way weaken the call for forest protection.

THE REPRODUCTIVENESS OF OUR FOREST LANDS.

AMONG the offsets which stand over against the dangers that threaten to extinguish the productiveness of forest lands in this country, the most important is a quality of the forest itself. The reproductive power of the greater part of our forest lands is strong. There is a constant and, when unhindered, a successful effort of nature to replace by young trees the old ones which are continually destroyed. To this process, unceasingly repeated through hundreds or thousands of centuries, we owe the forests of the present day, and to it the forests of the future will, of course, be due. If human intervention were excluded, the forest itself would take care of its own future. With a reasonable balance between destruction and protection it will still do so when civilization comes in contact with the forest.

PRACTICAL LUMBERMEN INCREASING.

A SECOND offset is the widespread public interest above mentioned, which is beginning to become effective not only in legislation, but, and this is of far greater value, in leading to practical action by individual forest owners. "Get rid of the timber" is no longer the unquestioned axiom that it was. To cut the timber and yet save the forest looms up as a clearer and clearer possibility in the minds of timber owners, and the examples of the practical lumbermen who are handling their forest lands along the lines of practical forestry are multiplying with most gratifying rapidity both in numbers and in force. It is through the enlightened self-interest of the owners of timber land, even more than by legislation, or by the press, or by public sentiment itself, that our forests must actually be saved.

These are, briefly, the principal forces which are at work for and against forest preservation in the United States. How they are working out and how they may be guided toward better work I hope to discuss in subsequent numbers of OUTING.

A GUN ROOM CAUSERIE

A SHORT CARTRIDGE WANTED

TO the sportsman possessing scientific instinct there is something very irritating in the dominance of the ordinary standard cartridge. Eley and Daw, two enterprising manufacturers of long ago, brought it from France, and by adopting its size for their own wares, created the standard cartridge case. Mathematically, it is not what it ought to be. Its dimensions are wrong both in relation to its contents and the capacity of the barrel in which it is fired. Still, it persists. The conveniences arising from extensive use are greater than the advantages expected from a change. The extra long cartridge did little to threaten the supremacy of the standard length. It remains to be seen whether the short cartridge will prove a serious rival.

Time was when, given a gun of a certain calibre, the right load was found for it, and adopted. Now, if there is any one rule that governs the general construction of shot-guns, it is that each gun is built of such dimensions as will best serve to shoot a given charge. In old days one measured the charge by the number of fingers' breadth the ramrod projected from the muzzle; with the early breechloaders the maximum load was determined by the length of the standard cartridge case. A quarter of a century ago choke-boring was adopted, and the shooting of guns improved; new explosives, hard shot, accurate loading and many things of less importance all contributed to a better performance at targets and game. The cartridge case remained of the same size. Adherence to the standard cramped gun-makers and hindered the development of sporting explosives. Pigeon shooters broke away from the bonds by using extra long cases in special weapons; but their requirements were of a special kind, and the lengthening of the case was much the same sort of thing as yacht designers resort to in order to get the greatest advantage with a certain rule of measurement. Their efforts have had but little practical effect upon ship-building, and pigeon guns and cartridges are not generally used for game shooting.

WITH guns and explosives the tendency is towards concentration. Guns are made lighter, shorter and handier; modern explosives increase in strength as they diminish in bulk, and loads are smaller than they were. A cartridge case of the standard length is not required in order to obtain the best shooting with the standard charge and load. No advantage is derived from filling up with wadding; the cartridge case ought to be shorter, and the chamber shorter, too. Guns specially built for short cartridges would meet all the ordinary requirements of sportsmen. Without sacrificing the shooting qualities, the barrels might be shorter, the gun, therefore, handier and better balanced; and, possibly, other advantages developed which at present are not apparent.

Every one who has used the two-inch cartridges in ordinary guns has found the advantage of the shorter case. The cartridges are lighter, they extract better and they are cheaper. On the other hand, there is the risk—a slight one, certainly—that the shot may ball occasionally. That risk would be avoided if the guns were specially chambered for the short cases, but the short chamber in the gun of ordinary dimensions would not be so advantageous as a gun built throughout to use a short cartridge and no other. It is this last that is specially recommended to sportsmen and gunmakers. Apparently, the short cartridges perform well in the ordinary gun, choke-bored or cylinder.

It does not follow that the cartridge good enough for shooting early in the season will prove effective when birds are wild and heavily feathered. Whether the short cartridges are good enough all round or not in nowise affects the contention that they are all-sufficient for early shooting. The man who of necessity carries a good all-round gun on every occasion will not deny that sometimes he has too much gun; and if the short cartridge did no more than lessen our burden when the days are long and the weather hot, sportsmen would be grateful. For those sportsmen who specialize, a gun for the two-inch cartridge will become as indispensable for September shooting as a trout-rod is to the flyfisher. The full advantages are not to be had in any other way. It will not do to choose a smaller bore as being the equal of the larger bore with the shorter cartridge; for the smaller bore, whether 16 or 20, is equally with the 12 burdened with a cartridge too long for the best shooting that can be obtained with it when using the best modern ammunition. Some day, doubtless, two-inch cartridges will be procurable in these gauges also.

Cartridges are very much better made than they used to be. They are of better material, and improved processes of manufacture have increased the strength, uniformity and finish; but they are not perfect. Cases wholly of metal have their advantages even as paper ones have. Possibly the right material has not yet been found. Celluloid has been mentioned, and it may ultimately be made efficient. It is stiff, light, elastic, and has a good surface; its present difficulties are liability to combustibility, and it is pervious to water. Whatever material is next tried, and there have been many futile essays during the past decade, the object should be to provide a shorter and lighter cartridge case than any at present in use. Whether it can be easily loaded by sportsmen is not now a matter of much importance; and as to the cost, that even is of less moment than it was, for sportsmen are always ready to purchase anything which is really advantageous.

WIRT GERRARE.

FOR THE SPORTSMAN'S LIBRARY

Handbook of Figure Skating. By George H. Browne, A.M. (Harvard), of the Cambridge Skating Club. Springfield, Mass.: Barney & Berry.

THIS is an eminently practical treatise, published in a form so convenient that skaters who wish to follow its teachings on the ice can carry it handily in the pocket. The six hundred illustrative diagrams show with utmost clearness just what the skater wants to know concerning the details of each figure to be mastered. The book is divided into three parts: Part I. What to Do, containing an account of the several national methods; Part II. What to Do It With, The elements, the strokes and the types of combinations; Part III. How to Do It. Brief hints and cautions. It is a book serviceable to the expert as well as to the novice.

Squirrels and Other Fur-Bearers. By John Burroughs, with fifteen illustrations in colors, after Audubon, and a frontispiece from life. Houghton, Mifflin & Co.

WHAT Mr. Burroughs studies he masters, and what he knows he communicates to his readers. In *Squirrels and Other Fur-Bearers* he literally takes one with him to the haunts of the humbler wild folk—the squirrel, chipmunk, woodchuck, musk-rat, skunk, weasel, mink, raccoon, the opossum and the little mice; and by his friendly aid one can see things that only a patiently long observer and a lover of this little phase of life would discover. Audubon's colored plates complete the story with a faithfulness that the photograph could scarcely excel and an artistic touch which the camera lacks.

Along French Byways. Written and illustrated by Clifton Johnson. The Macmillan Company.

MR. JOHNSON has three qualifications for making a book of travel—a camera he knows how to use, a stroller's disposition and a happy knack of making friends where'er he be. This combination has enabled him to embellish a wide circuit of France. Whether he be in his little inn on the borders of the forest of Chantilly, studying child life and thrift, or amidst the models that inspired Millet at Barbizon, searching for the battlefield of Poitiers, wandering through Domremy, the home of Joan of Arc; or amidst the pilgrims of Lourdes, the city of modern miracles, or homeward bound by the West coast to St. Malo and Mount St. Michaels, he has pen pictures that are fresh, interesting and useful, and camera notes that are enticing.

Autumns in Argyleshire with Rod and Gun. By the Hon. A. E. Gathorne-Hardy, with illustrations by Archibald Thorburn. Longmans, Green & Co.

MR. GATHORNE-HARDY is a type of thousands of men who are busy ten months in the year in matters of law or state, or medicine or other intellectual occupations,

and every autumn hie them away to some favorite northern river or moor or forest to tighten up the machinery of the brain. There is many a lesson to Americans in his narrative, on the practical results and the monetary value of the preservation of our native wilds. Future generations, even more than the present, will reap the rich rewards or suffer the dire consequences of our present policy. There is no reason why our native northern tracts should not for untold generations yield the rich harvest of health and wealth that Mr. Hardy testifies to in *Autumns in Argyleshire*.

Memories of the Months (second series). By the Right Hon. Sir Herbert Maxwell, Bart., M.P. Edward Arnold.

THESE *Memories* have little relation to months as units of time beyond the fact that each of them treats of some subject of more or less pertinence to that season of the year. They are an almost unique collection of short essays or reflections from the author's commonplace book on subjects, many of which will appeal, straight and powerful, to the sportsman, and all of them to the country gentleman. They are wise, witty and pertinent, and range from natural laws wide as the universe to the humble mole; from a city window flower-box to the forest ranges. Nothing in country walks or in the field shooting or by the waterside fishing, escapes paying tribute or yielding some pleasant minutes to the observer and his readers. It is impossible to analyze the *Memories*; they can only be enjoyed, and that over and over again.

In and Around the Grand Canyon of the Colorado River in Arizona. By George Wharton James, with numerous illustrations. Little, Brown & Co.

THERE is a ring of actuality about this book, the growth of ten years' visits, and an accumulation of facts never before gathered on the subject. The newest trails and methods of exploiting the numerous canyons are given, as well as the more ancient but now less used ones. The work bears the earmark of the author's admission that it was jotted down from day to day and in more divers places, perhaps, than any other book ever was. But while this method ensured accuracy, it did not tend towards method; and the reader has often to piece his matter together for himself. The illustrations are from photographs, the result of much painstaking, and they are very successful.

Soiling, Ensilage and Stake Construction. By Frank Sherman Peer, with illustrations. New York: M. F. Mansfield.

MR. PEER does not farm for pleasure, but for his daily bread and the profit there is in it; and this book relates his experiences in growing and storing, soiling and ensilage crops, and gives the latest and most economical methods of summer and winter feeding of live farm stock and their management and stabling.



"I'LL SAVE HIM FOR THE BOY TO PLAY WITH."

O U T I N G

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WILD MOTHERHOOD

By Charles G. D. Roberts

THE deep snow in the moose-yard was trodden down to the moss, and darkly soiled with many days of occupancy. The young spruce and birch trees which dotted the trodden space were cropped of all but their toughest and coarsest branches; and the wall of loftier growth which fenced the yard was stripped of its tenderer twigs to the utmost height of the tall bull's neck. The available provender was all but gone, and the herd was in that restlessness which precedes a move to new pastures.

The herd of moose was a small one—three gaunt, rusty-brown, slouching cows, two ungainly calves of a lighter hue, and one huge, high-shouldered bull, whose sweep of palmated antlers bristled like a forest. Compared with the towering bulk of his forequarters, the massive depth of his rough-maned neck, the weight of the formidable antlers, the length and thickness of his clumsy, hooked muzzle with its prehensile upper lip—his lean and frayed hindquarters looked grotesquely diminutive. Surprised by three days of blinding snowfall, the great bull-moose had been forced to establish the yard for his herd in an unfavorable neighborhood; and now he found himself confronted by the necessity of a long march through snow of such softness and depth as would make swift movement impossible and fetter him in the face of his enemies. In deep snow the moose can neither flee nor fight, at both of which he is adept under fair conditions; and deep snow, as he knew, is the opportunity of the wolf and the hunter. But in this case the herd had no

choice. It was simply take the risk or starve.

That same night, when the moon was rising round and white behind the fir-tops, the tall bull breasted and trod down the snowy barrier, and led his herd off northward between the hemlock trunks and the jutting granite boulders. He moved slowly, his immense muzzle stretched straight out before him, the bony array of his antlers laid back level to avoid the hindrance of clinging boughs. Here and there a hollow under the level surface would set him plunging and wallowing for a moment, but in the main his giant strength enabled him to forge his way ahead with a steady majesty of night. Behind him, in dutiful line, came the three cows; and behind these, again, the calves followed at ease in a clear trail, their muzzles not outstretched like that of the leader, but drooping almost to the snow, their high shoulders working awkwardly at every stride. In utter silence, like dark, monstrous spectres, the line of strange shapes moved on; and down the bewildering, ever-rearranging forest corridors the ominous fingers of long moonlight felt curiously after them. When they had journeyed for some hours the herd came out upon a high and somewhat bare plateau, dotted sparsely with clumps of aspen, stunted yellow birch, and spruce. From this table-land the streaming northwest winds had swept the snow almost clean, carrying it off to fill the neighboring valleys. The big bull, who knew where he was going and had no will to linger on the way, halted only for a few minutes' browsing, and then

started forward on a long, swinging trot. At every stride his loose-hung, wide-cleft, spreading hooves came sharply together with a flat, clacking noise. The rest of the line swept dutifully into place, and the herd was off.

But not all the herd. One of the calves, tempted a little aside by a thicket of special juciness and savor, took alarm, and thought he was going to be left behind. He sprang forward, a powerful but clumsy stride, careless of his footing. A treacherous screen of snow-crusted scrub gave way, and he slid sprawling to the bottom of a little narrow

falling back with a hoarse bleat from each frightened effort; while the mother, with head down and piteous eyes staring upon him, ran round and round the rim of the trap. At last, when he stopped and stood with palpitating sides and wide nostrils of terror, she, too, halted. Dropping awkwardly upon her knees in the snowy bushes, with loud, blowing breaths, she reached down her head to nose and comfort him with her sensitive muzzle. The calf leaned up as close as possible to her caresses. Under their tenderness the tremblings of his gaunt, pathetic knees presently ceased.



"THAT SAME NIGHT WHEN THE MOON WAS RISING ROUND AND WHITE."

gully or crevice, a natural pitfall. His mother, looking solicitously backward, saw him disappear. With a heave of her shoulders, a sweep of her long, hornless head, an anxious flick of her little naked tail, she swung out of the line and trotted swiftly to the rescue.

There was nothing she could do. The crevice was some ten or twelve feet long and five or six in width, with sides almost perpendicular. The calf could just reach its bushy edges with his up-stretched muzzle, but he could get no foothold by which to clamber out. On every side he essayed it,

And in this position the two remained almost motionless for an hour, under the white, unfriendly moon. The herd had gone on without them.

II

In the wolf's cave in the great blue-and-white wall of plaster-rock, miles back beside the rushing of the river, there was famine. The she-wolf, heavy and near her time, lay agonizing in the darkest corner of the cave, licking in grim silence the raw stump of her right foreleg. Caught in a steel trap, she

had gnawed off her own paw as the price of freedom. She could not hunt; and the hunting was bad that winter in the forests by the blue-and-white wall. The wapiti deer had migrated to safer ranges, and her gray mate, hunting alone, was hard put to it to keep starvation from the cave.

The gray wolf trotted briskly down the broken face of the plaster-rock, in the full glare of the moon, and stood for a moment to sniff the air that came blowing lightly but keenly over the stiff tops of the forest. The wind was clean. It gave him no tidings of a quarry. Descending hurriedly the last fifty yards of the slope, he plunged into the darkness of the fir-woods. Soft as was the snow in those quiet recesses, it was yet sufficiently packed to support him as he trotted, noiseless and alert, on the broad-spreading pads of his paws. Furtive and fierce, he slipped through the shadow like a ghost. Across the open glades he fled more swiftly, a bright and sinister shape, his head swinging a little from side to side, every sense upon the watch. His direction was pretty steadily to the west of north.

He had traveled long, till the direction of the moon-shadows had taken a different angle to his path, when suddenly there came a scent upon the wind. He stopped, one foot up, arrested in his stride. The gray, cloudy brush of his tail stiffened out. His nostrils, held high to catch every waft of the new scent, dilated; and the edges of his upper lip came down over the white fangs, from which they had been snarlingly withdrawn. His pause was but for a breath or two. Yes, there was no mistaking it. The scent was moose—very far off, but moose, without question. He darted forward at a gallop, but with his muzzle still held high, following that scent up the wind.

Presently he struck the trail of the herd. An instant's scrutiny told his trained sense that there were calves and young cows, one or another of which he might hope to stampede by his cunning. The same instant's scrutiny revealed to him that the herd had passed nearly an hour ahead of him. Up went the gray cloud of his tail and down went his nose; and then he straightened himself to his top speed, compared to which the pace wherewith he had followed the scent up the wind was a mere casual sauntering.

When he emerged upon the open plateau and reached the spot where the herd had scattered to browse, he slackened his pace and went warily, peering from side to side. The cow-moose, lying down in the bushes to fondle her imprisoned young, was hidden from his sight for the moment; and so it chanced that before he discovered her he came between her and the wind. That scent—it was the taint of death to her. It went through her frame like an electric shock. With a snort of fear and fury she heaved to her feet and stood, wide-eyed and with lowered brow, facing the menace.

The wolf heard that snorting challenge, and saw the awkward bulk of her shoulders as she rose above the scrub. His jaws wrinkled back tightly, baring the full length of his keen white fangs, and a greenish phosphorescent film seemed to pass suddenly across his narrowed eyeballs. But he did not spring at once to the attack. He was surprised. Moreover, he inferred the calf, from the presence of the cow apart from the rest of the herd. And a full-grown cow-moose, with the mother fury in her heart, he knew to be a dangerous adversary. Though she was hornless, he knew the force of her battering front, the swift, sharp stroke of her hoof, the dauntless intrepidity of her courage. Further, though his own courage and the avid urge of his hunger might have led him under other circumstances to attack forthwith, to-night he knew that he must take no chances. The cave in the blue-and-white rocks was depending on his success. His mate, wounded and heavy with young—if he let himself get disabled in this hunting she must perish miserably. With prudent tactics, therefore, he circled at a safe distance around the hidden pit; and around its rim circled the wary mother, presenting to him ceaselessly the defiance of her huge and sullen front. By this means he easily concluded that the calf was a prisoner in the pit. This being the case, he knew that with patience and his experienced craft the game was safely his. He drew off some half-dozen paces, and sat upon his haunches contemplatively to weigh the situation. Everything had turned out most fortunately for his hunting, and food would no longer be scarce in the cave of the painted rocks.

III

THAT same night, in a cabin of unutterable loneliness some miles to the west of the trail from the moose-yard, a sallow-faced, lean backwoodsman was awakened by the moonlight streaming into his face through the small square window. He glanced at the embers on the open hearth, and knew that for the white maple logs to have so burned down he must have been sleeping a good six hours. And he had turned in soon after the early winter sunset. Rising on his elbow, he threw down the gaudy patchwork quilt of red, yellow, blue and mottled squares which draped the bunk in its corner against the rough log walls. He looked long at the thin face of his wife, whose pale brown hair lay over the bare arm crooked beneath her cheek. Her lips looked pathetically white in the decolorizing rays which streamed through the window. His mouth, stubbled with a week's growth of dark beard, twitched curiously as he looked. Then he got up, very noiselessly. Stepping across the bare, hard room, whose austerity the moon made more austere, he gazed into a trundle-bed where a yellow-haired, round-faced boy slept, with the chubby sprawling legs and arms of perfect security. The lad's face looked pale to his troubled eyes.

"It's fresh meat they want, the both of 'em," he muttered to himself. "They can't live and thrive on pork an' molasses, no-how!"

His big fingers, clumsily gentle, played for a moment with the child's yellow curls. Then he pulled a thick, gray homespun hunting-shirt over his head, hitched his heavy trousers up under his belt, clothed his feet in three pairs of home-knit socks and heavy cowhide moccasins, took down his rifle, cartridge pouch, and snowshoes from their nails on the moss-chinked wall, cast one tender look on the sleepers' faces, and slipped out of the cabin door as silently as a shadow.

"I'll have fresh meat for them before next sundown," he vowed to himself.

Outside, amid the chips of his chopping, with a rough well-sweep on one hand and a rougher barn on the other, he knelt to put on his snowshoes. The cabin stood, a desolate, silver-gray dot in the waste of snow, naked to the steely skies of winter. With the curious improvidence of the backwoods-

man, he had cut down every tree in the neighborhood of the cabin, and the thick woods which might so well have sheltered him, stood acres distant on every side. When the woodsman had settled the thongs of his snowshoes over his moccasins quite to his satisfaction, he straightened himself with a deep breath, pulled his cap well down over his ears, slung his rifle over his shoulder, and started out with the white moon in his face.

In the ancient forest, among the silent wilderness folk, things happen with the slow inexorableness of time. For days, for weeks, nothing may befall. Hour may tread noiselessly on hour, apparently working no change; yet all the time the forces are assembling, and at last doom strikes. The violence is swift, and soon done. And then the great, still world looks inscrutable, unhurried, changeless as before.

So, after long tranquillity, the forces of fate were assembling about that high plateau in the wilderness. The backwoodsman could no longer endure to see the woman and boy pining for the tonic, vitalizing juices of fresh meat. He was not a professional hunter. Absorbed in the clearing and securing of a farm in the free forest, he cared not to kill for the killing's sake. For his own part, he was well content with his salt pork, beans and molasses, and cornmeal mush; but when occasion called, he could handle a rifle as backwoodsmen should. On this night he was all hunter, and his quiet, wide-open eye, alert for every woodland sign, had a fire in it that would have looked strange to the wife and child.

His long strides carried him swiftly through the glimmering glades. Journeying to the north of east, as the gray wolf had to the north of west, he too, before long, struck the trail of the moose, but at a point far beyond that at which the wolf had come upon it. So trampled and confused a trail it was, however, that for a time he took no note of the light wolf track among the heavy footprints of the moose. Suddenly it caught his eye—one print on a smooth spread of snow, emphasized in a pour of unobstructed radiance. He stopped, scrutinized the trail minutely to assure himself he had but a single wolf to deal with, then resumed his march with new zest and springier pace. Hunting was not without its relish for him when it admitted some savor of the combat.



"AT THE REPORT THE WOLF SHOT INTO THE AIR."

The cabin stood in the valley lands just back of the high plateau, and so it chanced that the backwoodsman had not far to travel that night. Where the trail broke into the open he stopped, and reconnoitered cautiously through a screen of hemlock boughs. He saw the big gray wolf sitting straight up on his haunches, his tongue hanging out, contemplating securely his intended prey. He saw the dark shape of the cow-moose, obstinately confronting her foe, her hindquarters backed close up to the edge of the gully. He caught the fierce and anxious gleam of her eyes, as she rolled them backward for an instant's reassuring glance at her young one. And though he could not see the calf in its prisoning pit, he understood the whole situation.

Well, there was a bounty on wolf-snouts, and this fellow's pelt was worth considering. As for the moose, he knew that not a broadside of cannon would scare her away from that hole in the rocks so long as the calf was in it. He took careful aim from his covert. At the report the wolf shot into the air, straightened out, and fell upon the snow kicking dumbly, a bullet through his neck. As the light faded from his fierce eyes, with it faded out a vision of the cave in the painted rocks. In half a minute he lay still; and the cow-moose, startled by his convulsive leaps more than by the rifle-shot, blew and snorted, eyeing him with new suspicion. Her spacious flank was toward the hunter. He, with cool but hasty fingers, slipped a fresh cartridge into

the breech, and aimed with care at a spot low down behind the fore-shoulder.

Again rang out the thin, vicious report, slapping the great silences in the face. The woodsman's aim was true. With a cough the moose fell forward on her knees. Then, with a mighty, shuddering effort, she got up, turned about, and fell again with her head over the edge of the crevice. Her awkward muzzle touched and twitched against the neck of the frightened calf, and with a heavy sigh she lay still.

The settler stepped out from his hiding place, and examined with deep satisfaction the results of his night's hunting. Already he saw the color coming back into the pale cheeks of the woman and the child. The

wolf's pelt and snout, too, he thought to himself, would get them both some little things they'd like, from the cross-roads store, next time he went in for corn-meal. Then, there was the calf—no meat like moose-veal, after all. He drew his knife from its sheath. But no; he hated butchering. He slipped the knife back, reloaded his rifle, stepped to the side of the pit, and stood looking down at the baby captive, where it leaned nosing in piteous bewilderment at the head of its dead mother.

Again the woodsman changed his mind. He bit off a chew of black tobacco, and for some moments stood deliberating, stubbly chin in hand. "I'll save him for the boy to play with and bring up," he at last decided.

COON HUNTING IN MICHIGAN BY COMET LIGHT

By Stanley Waterloo

IN the autumn of 1858 Donati's comet streamed across the northwestern sky, an object of such splendor as had not been seen in the heavens for generations. Astronomers were enraptured, the intelligent of all classes enjoyed the nightly spectacle, while some of the ignorant, not quite capable of shaking off the superstition of earlier centuries, gazed doubtfully, and wondered what was going to happen to the world. All over the country there was much late sitting up and speculating, and the date became fixed for life in the minds of all now over fifty years of age.

Cooning was good in Eastern Michigan in that year. The tide of immigration had swept around Michigan to Wisconsin, and great regions were still sparsely settled. The incoming settlers had but begun to clear away the tracts of dense forests in the great counties of the eastern tier, and there remained much of primeval wildness. Through these counties small rivers, fed by a thousand creeks and brooks, flowed through great woods of oak and beech and birch and maple, through flats where thorn-apple and wild plum trees grew almost in orchards; through clefts between low hills,

and through swales where frogs piped vigorously in tens of thousands. In the ooze of the creeks and beneath the green lily-pads reposed myriads of fresh-water clams, or mussels; and in midsummer and early autumn, when the lesser streams ran dry and the water was left in pools, the small fish were held as surely as in a sieve. The holes of the land-crabs were everywhere. It was the paradise of the raccoon, or "coon," as he is ever country-named. The raccoon loves frogs and fish, a crab is a tidbit, and as for mussels, they are to him what jam is to a child. He loves, too, certain fruits of the forest, and they were his for the eating. No wonder coons flourished in this favored region; no wonder that the old blue crane, as he fitted through dusky corridors, looked on them grudgingly, and that the mink, seeking his own prey, was annoyed by their splashing and wrangling as he glided silently along beside the watercourses, or that the creek's soft margin was everywhere indented with their tracks, like those of a little baby. There were good hunting and good living and clan warring and love-making in this land of swamp and flat and forest; and cool streams

wandering in half darkness beneath green arches of thorn and plum and willow. The coon lives while he lives. What frogs and clams and crabs, and what romances! What feeding and fighting!

The coon went out one night;
Said he: "I will seek my love;
My soft-furred, dark-eyed love I'll seek
By the oozy bed of the winding creek,
Where the boughs are dense above
My tawny, timorous love, my bride:
Together we'll creep by the water's side,
And, O, I will serve her well!
I'll crush the stubbornest mussel-shell,
And a delicate bit she'll eat.
"And the burrowing crab and the stranded fish,
And the tender frog—each woodland dish
Will I lay at her pretty feet.
O, soon,
'Neath the light of the autumn moon,
While the forest sounds with the mud-
hen's croon
And the quavering cry of the flying loon,
I will meet my love," said the coon.

But times change, even for coons. The settler came, and hewed squares into the forest, and burned and plowed, and raised his crops of wheat and buckwheat, and, later, planted corn. It grew lush and strong in the soil, yet black with the decayed vegetation of unnumbered centuries, and the ears which formed upon the swaying stalks were tempting. The green sea of the cornfield flowed up to the forest's very edge, and the coons discovered something. They discovered that, for a coon, there is nothing upon the face of the fruitful earth as good as green corn! They ate. Then the settler and the coon became acquainted. Entering into the somewhat spirited companionship were a dog or two, and occasionally a boy.

In journals devoted to sports of field and forest often appear most graphic accounts of coon hunts; but they are hunts such as the Northern boy has never seen nor taken part in. They tell of white men and boys, of negroes and dogs and torches and swamps and low gum trees; of how the coon is treed and seen upon an outreaching branch, and of how some venturesome darkey climbs upward and far out and shakes the creature down; and of the hullabaloo which follows when the dogs assail the quarry. No such cooning ever took place in the deep woods of early Michigan. There the sport was more Titanic. No spreading gum tree, or any of its type, ever afforded the coon a refuge there; but he sought, instead, when the dogs were at his

heels, some tall elm or giant oak, towering, maybe, a hundred feet in height, with trunk to correspond. Rarely was a coon seen by the hunters before the death grapple with the dogs. Torches and axes were the equipment of the hunters, the torches made of strips of the shagbark hickory bound together, and burning as evenly as a wax candle. There was much night work for brawny arms in the year of Donati's comet.

There was a boy in those days who joined in the chase, though taking no part in the ax work—for that he was too young; but he was the inspiring spirit of the hunts. Born in the woods, almost a creature of the forest himself, he was ever wilder for the night's sport than the men whose muscles ached and whose joints protested after the day's hard labor. His own body was not weary; and, besides, did not all the coon skins go to him, and had he not vast ideas of what he would do with the money he would some time get for them? It required diplomacy at times, but the hired man was his faithful friend; his youngest uncle was something like a crony to him, and they usually succumbed to his pleas and arguments. The coons, he maintained ever, were ravaging the corn rows next the forest, and something, it was evident, must be done. What use in planting corn if you protect it not? And so, night after night in the comet year, the three would set forth for the cornfield equipped as should be, and accompanied by two eager dogs, one a cross between hound and mastiff, the other of vague ancestry, but a fighter, and each keen of scent and full of all wood wisdom. To where the clover carpet touched the cornfield's inner edge they would come, and at the word, the dogs would slip away like shadows between the long, still rows, and then would follow the time of waiting.

Ah, what nights! The moon hung brightly in the southeast, but her glory would not compare with that of the heavenly monster in the northwest. Throwing himself upon the ground and lying on his back, the boy would study the great white object, and puzzle over it, and wonder. Each night the whippoorwill was rustling through the thickets; the distant bark of a fox was echoing across the clearing; an owl was hooting; frogs croaked—there were all the wild sounds of the night. From the forest came the sweet, pungent fra-

grance of the scattered pines on the beech ridges, mingling with the perfume from the clover, and the idle, undulled senses were gratified to the full. What fancies the boy had!

Then, "Woof, woof, woof!" The dream ended; the boy was on his feet with a bound, for the dogs had treed the coon, far in the wood, and there was a rush in the direction of the deep barking, a quarter of a mile away, a clambering over fallen trunks, a stumbling through dense thickets; and incidents of many kinds. The old owl would cease his hooting for the time; birds of the day, disturbed in their sleep, would flutter blindly about in the bushes, and often could be heard the swift, measured "thump, thump!" of the hoofs of the startled deer as he fled in leaps. It was not good to be much behind the torches, for outside their circle of light was thick darkness and much stumbling. Once, though, the boy found light enough in the midst of all the blackness. The course of the dogs led across a tiny, long-abandoned clearing in the very heart of the forest, and as the hunters burst into it, they came upon a wondrous scene. The whole clearing, the very ground, seemed in a flame—a flame soft, lambent, milky, and unflickering. To the boy it was inexplicable. He started back, but as he saw the men plunge into the fire, he followed, and found that it did not burn. It was "foxfire," the phosphorescent gleam from the rotten wood which had flaked away from the decaying logs and covered all the open space. It was a sight to be remembered.

At last the tree up which the coon had fled was reached, and the situation considered with a degree of calmness. Rarely did the coon fail in exhibiting the craftiness of his race, and the dogs were found looking hungrily upward from the foot of the largest trunk in the vicinity. Then business began. In a minute the boy had a heap of dry leaves blazing; dry twigs next fed the growing flame, and dead wood from all about was heaped upon it until the fire was one of quality. Meanwhile coats and vests had been thrown aside by the men, and the depths of the wood resounded strangely with the sound of ax strokes. The boy threw himself down again, this time upon a bed of beech leaves, and peered intently upward, always curious and expectant. The dogs were as in-

tent as he, but acting oddly. One sat upon his haunches, close beside the tree, whining occasionally, but never shifting his position. The other circled silently about in the darkness a hundred yards away.

The fire flashed and blazed, great white gaps appeared upon either side of the tree—for axes in such hands bit starkly—and, before an hour was gone, came an ominous crackling as the gaps widened and deepened and approached the tree's dark heart. The boy rose to his feet again and withdrew a space, at a right angle from the direction in which the tree must fall. There were unsafe places on these occasions. Still rang out the ax strokes, the crackling became louder and more sinister, and the tree shivered throughout its body like some sentient, living thing. It wavered and tottered. The men joined the boy hurriedly. A tearing, a loud rending of splinters, and, leaning slowly for a moment, the enormous bulk rushed and roared downward through the tops beneath, and, striking the ground like thunder, bounded upward, and then sank into quietude. With a yell, the hunters rushed toward the distant mass of leaves and limbs; but other hunters were there before them. The dogs were there.

Here had been shown a sagacity almost human. One of the dogs, he who had kept guard at the bottom of the tree, leaped upon the fallen trunk almost as it touched the ground, and scurried along like a wildcat until he reached the crushed and intermingled branches, into the midst of which he plunged, yelping. The other, the dog hovering at a distance, had circled as the crash came, and rushed into the tops from the outside. Long had they hunted together, these two dogs, and slight chance for escape had the coon thus thrown between them. A moment of silence, save for a sniffing and whimpering, and then growls, snarls, and squalls. Then pandemonium, and a coon! So they did in Eastern Michigan in the year of Donati's comet.

Sometimes there were adventures. There were bears in the woods then, and ever in the heart of the boy lingered a fearful hope that some time the dogs would tree one. The experience came to him. One night the dogs were found barking beneath a big ironwood tree standing among the beeches on a ridge, and the men chuckled. Green ironwood is easy chopping, and the largest tree of the kind is not so large as an oak of

medium size. The fire was built, the boy lay in the leaves, as usual, and the choppers were about to begin their work, when the boy saw what he had never seen before. He saw something black emerge from the dark tree top, and come clambering deliberately backward down the trunk. One look was all-sufficient. "Bear!" he yelled shakingly, and then darted in the direction of the field, followed promptly by the startled men. But this was only a first impulse. They had not run fifty yards when all stopped simultaneously and burst into laughter at their own alarm. They chanced to have a rifle with them that night, and, in any event, for two men with axes to run away from a bear was a thing preposterous. They dashed back toward the tree, and, there, in the circle of light made by the fire, came upon a scene every detail of which remained clear in the boy's memory. Slowly the black form descended until its hind feet almost touched the ground, and then, with almost a roar, the two dogs together launched themselves upon it. That was a fight! The woods re-echoed with the sound of the fierce turmoil. Well for the dogs, and maybe for others than they, that the bear was not full grown, and that a big she-bear had been killed in the vicinity but a day or two before. The dogs suffered, but the battle was nearly equal, until the rifle put an end to the ugly fray.

That was an event for the boy! The skin of the young bear was his, and that was a prodigious thing. He was buoyant and full of suggestions to himself. The next morning, before he nailed the prize against the barn door, there to stretch and dry in the autumn sun, he, boy-like, tried an experiment which illustrated the quality of heredity. The hog-pen was a covered structure of logs, with a fenced-in yard in front in which the hogs were fed. They were gorging at the long trough beside the barrier when the young experimenter suddenly hung the fresh bear-skin over the top rail, and the wind carried its scent to the gluttons at the feeding place. Never was a greater revelation! With a simul-

taneous squeal of helpless terror the hogs rushed for the inner pen, and buried themselves together in the straw, still squealing as if the knife were at their throats in killing-time. Those hogs had never seen a bear, nor caught the scent of one; but their ancestors, a few years before, had often become his prey—in fact, throughout all time the bear has eaten the hog—but the dread of that particular scent had been transmitted. The creatures knew that it meant death to them! The boy derived much food for thought as the result of the morning's freak. He discovered that one can remember through one's great-great-grandfather.

And the autumn waned, and the corn was garnered, and the leaves began to fall, and coon hunting was at end. The barn doors were covered with the season's spoils, and the boy was wealthy in his degree.

Where the deep forests were, now, in early autumn, are fields of waving grain; where the swales extended are green vistas of timothy and clover, and, in the lowlands along the creek, the cattle feed, and in midsummer gather beneath the occasional shade tree spared by the woodman, or stand knee-deep in the pools where the coon and crane once found such royal feeding. The sound of the fox's bark comes no more across the clearing, and the coon dog is dethroned, the collie or the setter now reigning in his stead. The boy may sometimes revisit the old region, but it is a strange land to him, and he knows how Leatherstocking felt as he fled before the ax and toward the ever-receding West. But he had a life while it lasted.

In the year before Donati's comet the fall season was dry, and the coons lived chiefly in the far swamps, where the frogs and other food were. The year following the comet was of the same character, so that in neither year was the hunting as good as in 1858. But the boy did not comprehend causes then, and good cooning became, in his mind, firmly associated with the marvel of the sky. And to this day, he does not really know whether comets make coons or coons make comets.

THE STORY OF THE SPORTING GUN

By Wirt Gerrare

FIREARMS, of a sort, are supposed to have been used before gunpowder was invented; but the history of sporting guns is not concerned with the prototypes of these early weapons, and they need not be specified. Nor do the early cannon devised for military purposes call for particular mention. Long after the days of Roger Bacon and the



EARLY HAND GUNS.

monk Schwartz, all firearms were far too clumsy and rudimentary to have been of use to the hunters of game.

A piece of iron shaped like a tun-dish was the first gun. Of this, the pipe is the powder chamber, and the widening muzzle—convenient for stone or ball of any size readily procurable—is the barrel. Experience proved that the strain from firing was exerted near the breech end, which in later specimens was strengthened by increasing the thickness of the metal there. The shot had to be directed, therefore the tun-dish was elongated into a tube. In order the more easily to manipulate the weapon it was attached to a stout piece of wood. As a "fire-stick" it had a vogue. When used it might succeed as a gun, and if its shot missed the mark the weapon was still serviceable as a cudgel.

This primitive firearm was useless for sport. From it the match-lock musket was slowly developed. First a spike was fitted near the breech, and to this the slow-match was attached, so as to be near at hand when the moment arrived for firing the gun. Then the spike became a mov-

able holder, so that by a movement in one direction the match could be pressed upon the touch-powder. Next, the holder was pivoted; and then the hand that fired the gun was not necessarily removed from the stock, so was of use also in keeping the gun pointed towards the mark. Other devices were added to return the match from the touch-hole, and maintain it in position automatically. Later the touch-powder was placed in a pan at the side of the barrel instead of upon the top; the pan was covered to keep out the sparks and the wet, and when the pan-cover was also worked automatically by pressing the trigger, the match-lock was perfect.

The match-lock did not suit the purposes of the hunter, the difficulty of keeping the match alight being too great. A company of harquebusiers could keep the required fire going amongst them, and when about to engage the enemy could pass the light along the line from man to man; but that plan was not possible when hunting; so, although the match-lock gun was sometimes used for killing large game driven into nets, it did not supersede the crossbow as the general weapon of hunters.

Early in the sixteenth century a German monk applied the principle of the flint and steel to firearms. The flint was pressed into the touch-pan by a spring. Through the pan a bar of roughened steel could be moved to and fro, and the sparks this friction engendered fired the gun. Almost immediately the gunmakers improved upon this by substituting for the bar a disk of steel, and rotating it automatically by means of another spring and chain. This disk was wound up with a key, and held in position by a stop-peg withdrawn by pressure upon the trigger.

Such was the wheel-lock. Its mechanism was many times improved in various details, the changes following closely upon the progress made by the watchmakers of Nuremberg, the city in which originated this, the first firearm which can be ranked as a sporting gun. The wheel-lock was intricate, but not inefficient; it needed fine

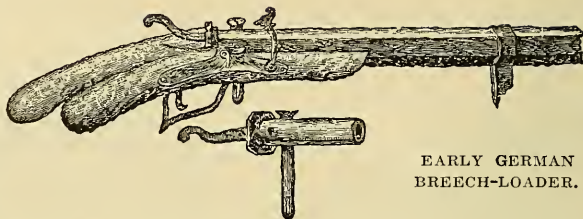


A MUSKETEER WITH HIS MATCH-LOCK, BANDOLEERS AND REST.

workmanship, so was costly. The Miquelitos, a band of marauders in the Pyrenees, are popularly supposed to have evolved the fire-lock from the wheel-lock. The burning slow-matches of the match-lock betrayed their whereabouts, and wheel-locks they could not procure; so they more closely approximated the action of striking fire with a flint and steel, directing the sparks into the touch-pan instead of the tinder-box. The result was the fire-lock with the mechanism outside the lock-plate, very much as used at the present time in the East. The first weapons on this principle appeared in Spain early in the seventeenth century; by 1640 they were common in Italy and France, and the new order of sporting which was then coming into fashion hastened their adoption.

Later improvements arranged the mechanism where it was better protected from blows and rain, lessened the liability to miss fire, and were directed towards rendering the arm serviceable for military purposes. These details it is needless to specify, nor is it possible to give here particulars of the many varieties of fire-arms devised at different times for specific purposes, or the multitudinous forms assumed by the sporting gun at different periods.

Rifling was discovered in Germany early in the sixteenth century, and the wheel-lock rifle quickly displaced the crossbow in that country. It followed closely the pattern of the weapon it superseded. Instead of the bolt used in the crossbow, the rifle fired at first a short cylindrical bar, and later a spherical ball, but not at a high speed, the ratio

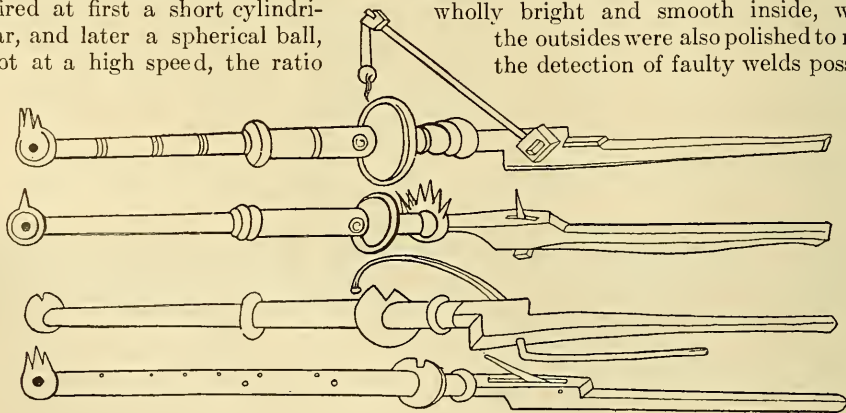


EARLY GERMAN
BREECH-LOADER.

of the weight of the projectile to its velocity being such that the momentum of the ball allowed accurate shooting at short ranges. The sporting use of this rifle was confined to the killing of large game which had been hunted by dogs or driven by men after the fashion of the time. It was used instead of the spear, knife, or crossbow to give the *coup de grace* to the animal already taken, but was for a long time altogether too cumbrous and slow to be used with success on small animals, or at game in rapid motion.

The smooth-bore musket was lighter, and, in order to increase the shooter's chances of hitting, was frequently loaded with two bullets, or three or more slugs instead of a ball. Then, for small game, it became customary to load with a couple of small metal tubes.

It was the superb work of the smiths which adapted the musket to the purposes of sport. The cleverness of these craftsmen is not easily estimated, but the closeness with which they forged is proved by the marks of the hammer and chase still visible upon the limbs of the lock mechanism of old arms. The barrels were, perhaps, not so closely forged, as it was important that when finished they should be wholly bright and smooth inside, whilst the outsides were also polished to make the detection of faulty welds possible.



THE DEVELOPMENT OF THE MATCH-LOCK.

The Spanish masters had the advantage. Possessing the purest iron and the finest steel, they made the best and lightest barrels. Their method was to weld small pieces together in order to get the fibers of the metal diversely distributed. By so doing the tenacity of the iron was increased, and a lighter barrel became possible. Later, the fragments were first welded into strips, and these strips coiled and the joints welded together. Thus was evolved the twist-barrel, which later became known as laminated steel, of which the "Damascus" metal is only a variety.

The old "hand-gonnes" of war weighed about forty pounds; the barrels were between four and five feet in length, and not less than an inch and a half in diameter. Milan "pieces" used for sport were not much smaller in the bore, but better workmanship and material allowed of the weight being reduced to ten pounds, or even less. At the close of the eighteenth century a barrel of fifty-six inches in length, and of about ten gauge, was considered the best. Thus the sporting gun of the period was very much like the military musket, the old "Brown Bess" of Wellington's campaigns.

The next radical change was due to Napoleon's restrictions on the trade in fire-arms. To prevent guns made on the Continent finding their way into the hands of his English enemies, he prohibited the manufacture, except for his own armies, of barrels of large gauge. The makers of the firearms consequently turned out sporting guns of twenty gauge and smaller, and what had been taken by sportsmen of necessity was subsequently acclaimed by them as correct, and adhered to from choice.

This undoubtedly accounts for the vogue small-bore guns had in Europe at the beginning of the last century. It is possible that it had also another effect—the production of double-barreled guns. It is evident that a gun with two barrels of musket gauge placed side by side would be a cumbrous weapon. The few double guns made prior to this date were either curiosities or had the barrels placed one over the other—a plan Bossi, the Italian gunsmith of the seventeenth century, tried to make popular, with little success. It was on this plan, too, that Napoleon's double sporting rifle was built.

When sportsmen were compelled to use a barrel of about half the capacity of that to which they had been accustomed, it is natural that they should endeavor to make good the deficiency by duplicating the parts. The double-barreled guns of small gauge were no more cumbrous than the single-barreled fowling-pieces of that age, and their advantages quickly established them in public favor.

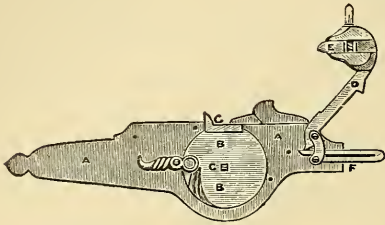
From that time the English gunmakers led the fashion in sporting arms. They improved the shotgun—stock, lock, and barrel. The elevated rib connecting the two barrels was the invention of Joseph Manton, who also improved the breech and the ignition. His locks were of excellent workmanship, his safety devices to prevent accidental discharge, both when carrying and when loading the gun, were trustworthy, and his stocks were well shaped and tastefully ornamented. In short, the English shotgun at the commencement of the nineteenth century was of a model as good as any procurable to-day, and, within its limits, as highly developed.

The chemist wrought the next change. A Scotch clergyman applied a fulminate to ignite the powder, and dispensed with the flint and steel. But the percussion-cap gun was not evolved in a day, or in a decade of years. There were first guns made to use the fulminate when made up in the form of pilules, or amorces, or contained with the priming in tubes. The tinned-iron capsule preceded the copper cap, and it was not until half a century after the first discovery, and after many brains had been busy devising simple methods of applying the fulminate effectively, that the percussion-gun attained any high degree of perfection.

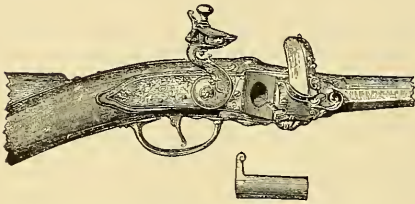
Up to fifty years ago there was little or nothing of gunmaking on scientific principles, but there was wonderful craft, as the best of these muzzle-loading guns prove. Greener knew nothing of pressure curves, but by putting rings of lead at different distances along a barrel and altering the thickness of the barrel until firing it expanded all the rings to the same extent, he obtained that form for the outside of the barrel which has proved to be correct.

The workmanship also was improved. If a gun of the best Spanish or Italian make is compared with a modern percussion-gun in such a detail as the breech, for instance,

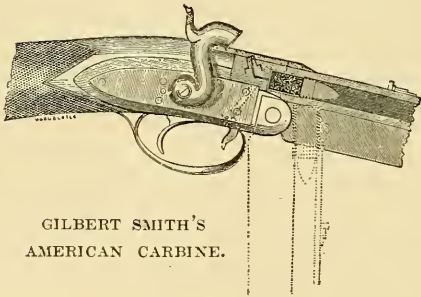
the advance made in a century is very marked. The earlier gun has merely a short plug screwed into the barrel. The



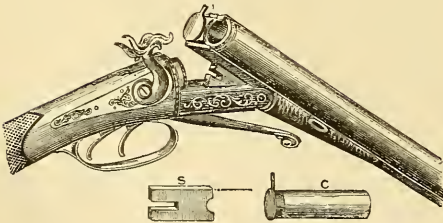
THE GERMAN WHEEL-LOCK.



ITALIAN FLINT-LOCK BREECH-LOADER.



GILBERT SMITH'S
AMERICAN CARBINE.



THE ORIGINAL LEFAUCHEUX
BREECH-LOADER, 1836.

later one has the barrel enlarged to take a plug of greater diameter; this plug is cupped out to hold the powder and is expanded by

firing the gun; its edge also fits closely against the shoulder in the barrel; the screw-thread fits exactly throughout its entire length, and the plug has upon it a flange which beds firmly against the very end of the barrel. With such a breech it is quite impossible that there should be any discharge of the powder gases backward. If the nipple on which the cap is placed is screwed out, it will be found cupped, stoppered, and fitted to the breech-plug in exactly the same way. The workmanship of the leading gunsmiths who built by hand fifty years ago has never been excelled and nowadays is seldom equaled. The finest specimens of their work are examples of the utmost that can be done by rule of thumb.

Whilst some gunmakers were congratulating themselves that their products had attained perfection, others endeavored to combine the newest method of ignition with the old, discarding the principle of loading at the breech. Here, once more, progress towards adequacy was slow. The flash of the fulminate, so strong when compared with the feeble spark from the flint on striking the steel, pierced ordinary cartridge paper, and manufacturers and inventors were hurrying into a *cul de sac*. The gun of the day had the military cartridge inserted in the barrel at the breech end, and the new percussion-cap sufficed to fire it. A wad at the base of the cartridge served as a gas-check, and this was pushed forward by the insertion of the next cartridge. Such was the capping-carbine of the mid-century wars.

Radical change resulted from the production of a cartridge that contained its own means of ignition. The origin of cartridges is lost in the obscurity of the far past. Very early the harquebusiers made up their charges separately; in the sixteenth century their use was common, but a cartridge containing its own ignition was new. In its earliest form the detonator was in the shape of a tube attached to, or other protuberance extending from, the cartridge rather than within it. Then the cap was placed at the base of the projectile, and a striker pierced the soft case of the cartridge as well as the charge of powder, in order to reach and detonate it. The well-known Prussian needle-gun is upon this principle.

Houiller, a gunsmith of Paris, deserves the credit of inventing the modern cartridge.

In 1847 he patented the pin-fire cartridge practically as it is to-day. As an alternative method he specified a rim-fire cartridge and also one with central-fire ignition, but not the pattern now in use.

A cartridge case which contains its own ignition can be made gas-tight; more, by its expansion it acts as an obturator, and thus allows of breech-loading, as it prevents any escape of the powder gases through the joints of the breech mechanism when the gun is fired. It is the latest of the inventions that have revolutionized gunmaking.

The gunmakers of Paris were quick to benefit by Houiller's discovery. Lefauchaux and Lepage both chose a modification of Pauly's system of breech-loading for their guns, and Pauly's system was but a slight alteration of that principle of hinging together of barrel and breech which had been used again and again in various countries during the centuries in which the art of the gunmakers flourished on the continent of Europe.

Other methods were revived and devised, but for the purposes of the sportsman, the drop-down principle answered best and has survived all others.

Schneider, Pottet, Daw, and gunmakers English and foreign, improved the central-fire cartridge which slowly but surely superseded the pin and rim fire systems. The central-fire Lefauchaux gun was but little better than the pin-fire, and for some years the chief improvements in guns were all concerned with perfecting the breech mechanism, and directed towards giving greater strength and durability to the parts, and only later towards producing a gun that allowed of easier and quicker manipulation of the action. A double bolt for a single one to unite barrels and action was a notable improvement; a third bolt, across and at the top, was better again—so much better, that beyond it no one has found it possible to go. The locks were improved, and made to rebound so as to relieve the detonating cap of all pressure save just when struck. Then came hammerless guns, and the rebounding lock was useless.

Of rival hammerless guns much might be written, but at the present time all that can be positively asserted is that those mechanisms are the best in which the cocking of the locks is accomplished automatically.

So much also may be asserted in respect of the ejecting mechanisms for throwing out the cartridge which has been fired. The best will be that which does its work without requiring any conscious effort of the shooter and utilizes to the full extent the weight of the barrels in falling, as the gun opens.

Choke-boring, which if it did not originate in America was successfully developed there, is a discovery of the very first importance, since it not only increases the efficiency of the gun, but enables the gunmaker to control its actual performance. Choke-boring also has made gunmaking more of a science and less of a craft.

Probably no article in use to-day has been brought to its present state through so long a period and with so many radical changes as the modern shotgun. Almost each type of gun has been developed to its highest state of perfection little by little, and each perfected type of the past has fallen into desuetude owing to some change of principle which, whilst it has altered the type, has also lowered the gun in some particular from the degree of excellence the best of its class had attained.

At present there is no indication of any great change being imminent; if any notable alteration should come quickly, doubtless it will be in respect of some detail concerning which change is now least expected. But it must not be supposed that modern guns of the prevailing type are perfect; each season some slight improvement is made—and others are needed.

It may be stated that the gun of the near future will be very like that of to-day, but there will be less gun. The use of concentrated nitros allows of a shorter cartridge case. Instead of packing the ordinary case with additional wadding, the sensible thing to do is to shorten the case, thus shorten the chamber, and consequently the barrels and the gun. Possibly, too, guns can be built closer than they are at present; the breech ends of the barrels brought nearer to the butt-plate, the gun made to balance farther back, and so be more easily raised to the firing position and more quickly aligned. Minor improvements only are such as these, when compared with the great changes of the past; they nevertheless are apparently the changes which will hasten the development of the sporting gun.

IN WINTER WOODS

By Lynn Tew Sprague

THE acres of my friend Ephraim lie among the Chautauqua hills, tipped toward the heavens at all angles. His home, like himself, old-fashioned, square, and unornamented on the outside, stands in an angle made by the highway and a little stream that saunters singing through all the months of the year, past the side stoop.

Eph—so he is familiarly called—is hard-muscled and hard-headed, a man plain in ways and appearance, but sound and hardy as any oak in his woodlands. His tall frame is slightly stooped, his neck is long and slim, and over his big nose and the high cheek bones of his gaunt face the skin is drawn, brown and tough as leather.

No carpet-knight is Eph, but big blue eyes that never waver, make you trust him, and his smile would drive all evil from the heart of a thief.

Eph loves the outdoor world, and even in these days of small groves is a true woodsman. He knows the birds, too, and their ways, and when I visit him in summer, takes long walks with me up the brook through his woods or over the hills to "the big holler back o' Strunk's Mill," to show me three veery fledglings, or the nest of a blue-winged warbler, or an oven-bird's covered home, or the spot where I may hear the brown thrasher sing as I "never heerd one sing afore, nigh about seven to-night."

It was my first winter visit to Eph. The February night had been passed pleasantly enough, with clay pipes and woodsy jokes and anecdotes, before an open fire of hickory logs that smoked and crackled quite as merrily as we, while outside the wind moaned and the snow flew, as if to give an additional sense of comfort within.

But the morning dawned clear and sunny, though cold, and my host and I did "chores," and, breakfast done, were away up stream to a wood which in these days might almost be called a forest.

My legs were thrust in a pair of Eph's cowhide boots, and about my neck and shoulders Eph wound one of his ample "comforters."

"Ye bird sharks be a purty tame lot, but there ain't much ter see this time o' year, so maybe ye won't mind havin' 'Wag' along this trip," Eph said; and with that he went striding towards his drafty kitchen, whistling and calling, "Wag! Wag! Whar be ye? whar be ye, sir?"

He joined me a moment later outside, with his beagle at his heels and a gun under his arm. "I thought we'd take Snip along too," he said; and he just lifted to the opening of the big side pocket of his coat a limp ferret, and dropped it back again.

How beautiful the winter world seemed as we strode along the untracked, drifted snow! At one moment we almost scuffed the frozen ground, the next we were hip-deep, as we followed the brook that here and there broke out from under a crystal roof and sang crisply to us.

What a tonic is the winter air! The blood went racing through my veins with the speed of youth. No wonder the nations of the northern zones are the nations that achieve!

The stump fences that climbed the hill-sides in the distance looked black on the white fields; the pines on the hilltop stood out against the pale sky as distinctly as pen-strokes. In the clear atmosphere the miles of Eph's domain, so familiar to me in bird days of early June, had shrunk to quarters. Or maybe it was the obliterating snow, gem-studded in the winter sunlight, that worked the magic.

Did these frozen white billows really cover the same meadows where the tall, waving, lark-haunted grass grew a few months ago? Were these half-buried, naked brown stems by the ice-bound brook the same willow bushes that shaded me while I fell asleep to dream golden dreams under the lullaby of stream and gurgling bobolink, or listened, half awake, to the dainty treble of the song-sparrow or the ripple of the red-wing's reedy note?

Eph's voice ran on ceaselessly, sounding sharp in the cold air, like the snap of a banjo. His English is awry, but his sense is sound.

"This 'ere winter's bin a hard un on part-ridges. Last spring was dry and mild, and lots o' young uns hatched out, but this winter's bin awful twisted; rained lots and froze hard arter, and then snowed wild geese and thawed agin, till ye'd think politicians was runnin' the weather. Wal, the birds been hard pressed fer food, long with it all, and last week up here in the beech timber, when I was gettin' out wood, I kicked a couple up from under the crust. They'd got frozen in one of their tunnels, 'cording to my calculation."

"Have you seen many other birds this winter, Eph?" I asked.

"Wal, not since 'bout the first of December, when I see the last of the juncos round in the brush—er few pert little chickadees and a sassy jay and a wuzzy-looking woodpecker now and then.

"I see only one snowflake this year—purty bird, them, ain't they? Mighty scarce nowadays; used to be plenty hereabouts when I was a youngster." And Eph stopped still and swung his long left arm in a great circle, whacking his hand against his shoulder to stimulate circulation.

We were nearing the woods on the border of which the stream spread itself out into a pool, fringed by a marsh. Wag had run on far ahead over the uneven snow, and, looking up now, I saw him disappear among the gaunt outposts of the woodlands just beyond the barren alders and willows that edged the frozen marsh.

"Say," continued Eph, "did I tell ye a young robin stayed all last winter up in the scrub hemlocks yonder? Got left some way when the rest went south, and didn't know the way, poor lonesome little critter. Needn't tell me 'bout migration bein' instinct. It's recollection, like 'twould be with we uns. Old birds have ter pilot young uns through the first time. Wal, this here un got along all right. It's midlin' warm in the evergreens, and twixt the mountain ash berries and the meal and stuff I used to take him——"

"Ki-woo-woo!" came the cry of the beagle, and Eph forgot his lonesome robin.

"Gosh!" he exclaimed. "Wag's struck fresh rabbit tracks plumb sure. It's that cold, I calc'lated the cotton-tails would be all holed up."

I followed his Indian-like strides through tangled brush stems and drifted snow, and then stopped with him to bend over some

tiny footmarks, where Wag had first nosed them.

Something from the dim centuries behind us thrilled me on the instant at sight even of those dainty prints—the long inheritance from primeval ancestors to whose one constant interest such things spoke.

"Them's not ten minutes old," said Eph. "He'll circle round here agin in a little spell."

He sought a high, clear mound a little distance away, and brought his old muzzle-loading gun into position. We could hear Wag crying on in the woods with the hue of a mighty stag-hound.

I sought a corner of the rail fence under an old oak—a gnarled giant of the generation of the grandfathers of the trees around—and waited, while the baying of the hound, now muffled, now clear, as if a door were swinging between, spoke again to the ghosts of remote ancestral huntsmen within me.

"Look out I don't pepper ye," said Eph; and as he spoke I heard the bushes swish and snap, and directly behind me the hound halloo like a bursting rocket. Eph's eye and gun swept my station murderously. The rabbit would break cover close beside me, and at the thought I felt the stray shot puncture my skin. But on the second, when my ears were fixed for the crack of the gun, they heard instead the hound halloo again, seemingly half a mile away.

Twice this disappointing maneuver, and then Eph drawlingly remarked: "Wal, I calc'late I'd best take a hitch further into the woods, and squat on thet thar stump yonder."

He climbed the fence, leaving me to examine the cocoons tied to twigs which brushed the rails—soft silken coverings, large, warm, hammock-like pouches that shelter the *atticus*, the strange bristling winter home of the bag worm, the smooth, cottony wrappings, no bigger than beans, that cover the many species of dark-bodied insects.

Thousands of lives, as mysterious, as unknowable, and perhaps as important in the inscrutable economy of God as our own, dangled there in the icy air. A few weeks of the sunny smiles and balmy breath of spring, and they will be a-wing to the music of hylodes now asleep in the frozen mud, and of crickets now buried deep under snow and stone.

But the baying of the beagle sounds near again, and nearer, and now suddenly seems

to come out of the very snow under my feet. All at once I see Eph's tall figure lift to full height on the stump. There is a flash of red fire, a sharp report, and a metallic tinkling echo through the winter woods. Then Eph goes plunging into the bare bushes and lifts into view a white carcass, while Wag barks with delight.

* * *

"These rabbits be fool things," said Eph a half hour later, as we sat on a fence. The sun had warmed the air to that degree just below freezing which makes a winter day most delightful; exercise, too, had taken the chill from my blood. My brain never seemed saner, my spirits throbbed high, like a boy's. The great open world about me, with its miles of white expanse on which was drawn in strong lines the naked forest all studded with ice gems, seemed a not less kindly, a not less habitable place than when violet-crowned June walked there beneath green arcades.

And Eph, sitting beside me, with infinite common sense in his brain and not a mean fiber in his big heart—Eph rugged and stalwart, and even handsome like the primeval man—seemed this world's truest and highest product.

A single cloud sailing rapidly in the east looked a huge balloon of crimson and gold. A blue jay laughed deep in the leafless woods. Atop the nearest hills the snow was tinted pink, and away to the south the deep green of pointed pines was edged with violet. "He who proclaims one season fairer than another, speaks of the health within him rather than the beauty without." And as I looked across this white, immaculate world where God had drawn with strong hand and colored with tints of heaven his woods and hills, my heart said, "Verily, the preacher is right."

This same fence, commanding so extensive a view, was a favorite summer seat of ours, and I remembered a June evening when we listened there to a sweet liquid strain unfamiliar to either, which proved to be the nocturne of a male catbird singing from the nest. And I recalled, too, how that same evening Eph had discovered on the limb of the beech tree, against whose icy trunk I was now leaning, the tiny lichen-covered nest of a ruby-throated humming-bird, which he declared to be "cuter'n a bedbug's ear."

But Eph's voice was now running on

in its high Yankee twang—"Yes, sir! they be foolier than sheep—rabbits be; but they be sich helpless little cusses, ye naturally kinder pity 'em. Hares, I s'pose, our rabbits properly be. I know it's a fashion nowadays to make out wild animals ter be mighty wise and elegant, but the fact is they be mostly a savage, cruel, nasty, ill-smelling lot—though cute 'nough 'bout some things. Why, I read a story this winter 'bout a family o' rabbits, an' they was all scholars and poets and mathmaticians, and had a language and laid plans, and did mer-nuvers that would twist a general. And the feller what wrote it meant it all scious-like. Wal, when I got through that story, Wag an' me came right out here, and Wag skeered up a rabbit an' I blazed away an' missed him, an' what does the blamed idiot do but circle right around ter me agin and let me blow his head off."

Eph was stroking the ferret as if it were a kitten, while he talked. Wag, after wearying us with tramping in the deep snow, had gone hunting on his own account. We heard him baying far away, as we sat gossiping on the fence, but Eph's most lusty calls failed to bring him in.

"'Nother time," continued Eph, "Wag an' me run one up inter a slantin', holler tree thet had ketched in fallin'. He was safe enough there, but when I pounded on the down end, he peeped out t'other, 's if he wanted ter make sure Wag was there, 'n then jumped plumb down inter Wag's mouth.

"'Nother time— Gosh! there's Wag callin' me. Hear him? He's got one holed, sure."

The beagle was not baying now, but uttering a sharp, quick bark. Eph dropped the ferret back into his pocket, and, sliding off the fence, strode away through the snow into the woods, with me at his heels, carrying the dead rabbit.

Ten minutes of Eph's long, rapid strides brought us to a half-cleared spot. There, sure enough, sat Wag, at the mouth of a woodchuck's old hole.

"Told ye," said Eph; "now Snip'll show ye what he kin do."

Eph made a hasty examination of the place, and found another entrance to the tunnel, some twelve feet away. He satisfied himself that the rabbit had entered where Wag was on guard, and that he was still under ground. He took the ferret

from his pocket, and, being warm with exercise, removed his coat and threw it across a log from which he kicked the snow. Then he started the ferret into the first hole, and quickly took his stand, gun in hand, at proper range from the other.

Though the beagle was now in eager and expectant position near the second hole, I took my station at his side, for I felt that whichever way the game might run, Eph, in the moment of excitement, would be more mindful of his dog than his guest.

The dog quivered with expectation. Eph stood with half-raised gun, rigid as a wooden Indian. With every tense second I looked for the rabbit to pop from the hole and for the flash and bang of Eph's gun. But seconds went and minutes followed, and no game leapt to view.

Finally Eph lengthened his long neck and stood on tip-toe, and muttered, "Wal, wal!" at which the beagle began to dance to the music of his own whining. Eph examined both holes more critically. There were certainly rabbit tracks leading into the first, and none leading from the second.

"Darned if this don't beat me," he said; and he called sternly down the first hole for the ferret. Wag, meantime, was tearing the snow and frozen dirt from the mouth of the other hole. Then Eph, in his excitement, took a rail from the near-by fence and rammed it into the opening. But nothing availed.

"Wal," said Eph at length, "I calc'late we'll have to smoke 'em out." We found some dry leaves in the hollow of a tree, and with the rotten wood from the heart of an old log, soon had a smouldering fire. Eph fanned the smoke into the entrance of the tunnel, and this time I stood watch with the gun. Eph worked like a windmill in a gale, but neither rabbit nor ferret came to surface, though the second hole was soon smoking like a mountain crater.

Eph was puzzled. "Darned if it ain't pesky funny," he said. "'Taint like Snip, either. I never knowed him ter bleed a rabbit yit, an' it don't seem as though they could

stand this here smoke, does it? Wal," he added, after a pause, "ye two [Eph was not conscious of bestowing any dignity on his dog] wait here a spell. I'm goin' ter the barn for a pick and shovel. We've got ter dig 'em out."

He turned towards the log where his coat lay, giving "ye two" minute instructions against the time he would be away. Then he picked up the coat, and a look of astonishment fixed itself upon his honest face.

Eph is not given to profanity, but now he ran his hand into his capacious pocket, and as he drew out the ferret, warmly sleeping there, he said in a voice not hotly angry, but slow and full of wonder, "Wal, devil, damn, blazes."

A glance unraveled the mystery. There in the snow were the ferret's tracks from a third hole which had escaped Eph's search, and this opened under a clump of hemlock brush at the farther end of the log; there were a rabbit's tracks from it too, leading not a hundred feet away to another clump of evergreens.

The ferret had done its work effectually enough; it had routed the rabbit out of his burrow. The hunter had been at fault in not having seen it escape, and the ferret, having completed its duty, had made its way back, undiscovered, to its snuggerly in its master's coat pocket, and contentedly gone to sleep.

Eph caught the gun from my hands. Wag had solved it all by this time, and was away with a mighty halloo.

The frightened rabbit leapt from cover, bounding right towards us, and Eph's gun flashed.

"Didn't I tell ye they was fools?" he said, as he picked up his limp quarry. "This one's bigger'n the other," he added, holding the two rabbits up together.

"No, they don't know much, and they do hev a hard time, twixt skunks an' owls an' dogs, an' me. Most folks don't know how ter cook 'em, but I'll make ye the best pot-pie ye ever et."

And, sure enough, he did.

AN ANGLING DEMOCRACY

THE OLDEST FISHING CLUB IN THE WORLD

By Leonidas Hubbard, Jr.

INDIAN scalping being forbidden by the decrees of William Penn, the early Philadelphians were obliged to look about them for other forms of recreation. This may account for the fact that the oldest fishing club in the world has its headquarters in the Quaker City. It came into being in 1732, the birth year of Washington, and has been preserved through all the succeeding generations. It speaks well for Quaker constancy that only twice has it

It is a quaint old institution, originated by men who loved the woods and the streams; men quiet and contemplative, who pointed to the Disciples on the Sea of Galilee as a precedent for their sport—for in those days of pious Quakerdom good biblical precedents were essential to well-nigh any undertaking. And they were men with imaginations, with an eye to the picturesque, for whom a dash of make-believe had its charm. The whole organization smacks of this strain.



"CASTLE" AND "HOUSE ON THE DELAWARE."

failed to hold its regular fishing seasons: once when the members were away practicing marksmanship on British officers, and again when pestilence seized upon the city, and the fishermen relinquished sport to succor the plague-stricken and carry to burial the bodies of cholera victims.

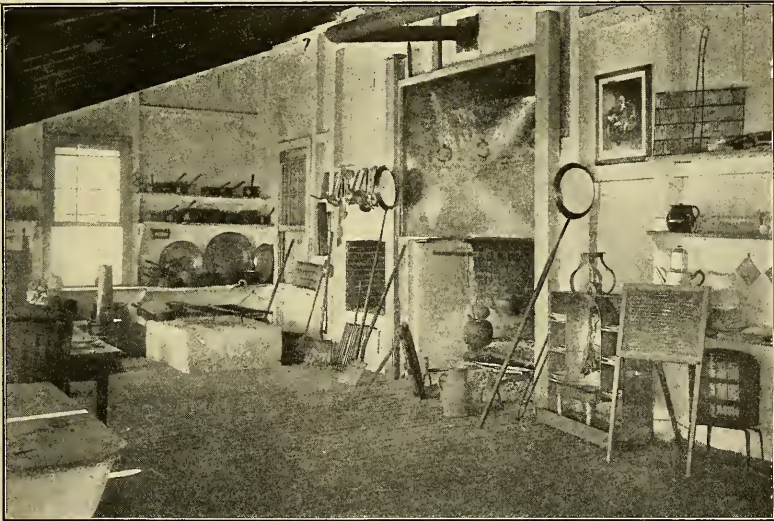
Instead of calling itself a mere club, it is the "Fishing Company of the State in Schuylkill." Its organization is not that of a company, but of a State. And the maintenance of this little mock government has added an element of play which a plain, matter-of-fact "fishing club" could never suggest.

In the earliest days, during the administration of Hon. Thomas Stretch and two or three succeeding governors, it was the "Colony in Schuylkill." But when the immortal George had transformed certain weak and oppressed colonies into free and independent States, the fishermen determined to do likewise, declared their independence, and brought into existence the "State in Schuylkill." Once a year the citizens come together to elect officers. A Governor is chosen. A Council of five members is vested with legislative authority. A Sheriff is the police and military power, and a Coroner is obliged to investigate the cause of difficulty when any fish shall come to the table in condition which the Epicurean tastes of the citizens shall judge to be unsavory. Its Navy has always been one of its cares, for that is an important possession of the State. A "fishing club" would call this a mere boat-house full of scows and skiffs, but the "State in Schuylkill" knows it to be a harbor containing frigates. In the early days of its existence the colony owed all allegiance to

with no nonsense about them; but these are forgotten, while the "State in Schuylkill" lives in all its primitive charm. The State is unique, and not only its organization, but its fishing days and its feasts are full of character.

We know from every scrap of history left us of the early days of this remarkable club, it was a band of nature lovers. Not once are the records blotted with the story of enormous catches or of unsportsmanlike conduct of any sort. There seem to have been no pot fishermen in the colony. Rather, the citizens were men who loved the woods and the streams and the hills for their own sake; they fished for the pure joy of getting out of doors with an occupation that gave freedom from town and opportunity to reflect.

We may imagine them analyzing and philosophizing over every bit of nature and every new experience, after the manner of Walton; and the only regret is that some among them did not leave their inductions to posterity, as did the Father of Angling.



THE KITCHEN AT RAMBO'S ROCK.

a baron. Baron Rundle was the first of these noblemen. He owned the land on which stood the Castle of the colony, and received an annual rental fee of three perch.

We may imagine that in those days, as in these, there were men who smiled at this play, and other men who scoffed at it. Some of them, no doubt, organized fishing clubs

And those old Quaker anglers were judges of good living, too. They knew the kind of dinner a man likes to see upon his table at the close of a day on—or in—the stream. The meals were prescribed. There should be no feasts such as are served at kings, tables, with fancy wines. Rather, their banquets must offer the plain, inexpensive

foods that delight the palate of the hungry woodsman. Rounds of beef there might be, without limit, and a barbecued pig was something which no dinner of the colonists ever lacked. Besides these the essentials were fish and game. Drinks were limited to punch, Madeira, and lemonade. Only once do we find a record of extravagance in the dinners; that was on a day when something over four pounds sterling (\$20) was paid for a turtle, and the cost of dinner ran to nearly seven pounds.

Game was a standard feature. Powder

require you, or any of you, to make diligent search for any of the said rabbits, squirrels and others of the game kind in all suspected places where they may be found, and bring the respective bodies of so many as you may find before the justice at a general court to be held on Thursday, the fourth day of October next, there to be proceeded against as by said court shall be adjudged."

We have but to close our eyes to see the quaintly dressed old sportsmen, with their flint-locked fowling-pieces, and their old-time fishing-tackle, gathering at the Castle



AVENUE LEADING FROM MAIDEN LANE TO THE FISH HOUSE AT RAMBO'S ROCK.

and shot were furnished to those who would forego a forenoon's fishing to provide game for the table; and among the papers of the State we find this proclamation, issued by the governor in 1774, when the mutterings of revolution were growing loud:

"Whereas great quantities of rabbits, squirrels, pheasants, partridges and others of the game kind have presumed to infest the coasts and territories of Schuylkill, in a wild, bold and ungovernable manner;

"These are therefore to authorize and

on Schuylkill on this day of the annual election. We may feel with them the joy of escaping from the city and from the city's labors. We may see the proud display of strings of squirrels and birds; we may see the same roasting at the great fireplace; we may even catch the savory odors from squirrel and quail and roasting pig. We may imagine the delight of a hungry fisherman who rose long before daybreak, as he sits down at that table. Ah, yes! and we catch, if our senses are keen, a dark

look that will come over the countenances now and then when some one forgets fishing and mentions the Navigation Act or King George; for

"The earth is full of anger,

The seas are dark with wrath."

And well may they feast now, for before another election day rolls round twenty-two of these twenty-five shall have hastened away to join the patriot army. Some will never again see the Falls of Schuylkill, and many will catch the agonizing memory of these tastes and odors when wandering barefoot through New Jersey or when starving in Valley Forge. For, despite their Quaker ancestry, these fishermen are fighters. They will retreat with Washington from Long Island; they will die at his side in their own native colony, and some of them will share in the glad victory at Yorktown.

And Washington was to become their hero. The proudest pages in their scant history tell of elaborate preparations for entertaining the general at their Castle; but while the preparation is described in full, the narrator is strangely silent as to the feast itself. Did their general go with them to their castle, and did he catch perch from the Schuylkill? And did he, perchance, take a fowling-piece and bring in game for dinner? But however this may be, the State did admit to full citizenship one of its heroes. This was General Lafayette, who visited the Castle and fished for a day with the Schuylkill fishermen.

Back in pre-revolutionary times we find cropping out the first tendencies that trouble fishing clubs of to-day—the tendency to lose sight of sport in love for the social features of the organization. There were members who came for the loaves without the fishes, and for the punch and Madeira, and the good fellowship. They neglected the fishing. So the council passed an act declaring that any citizen who failed to appear above Tillbury's Rock, tackle in hand, before eight o'clock in the morning of any fishing day, should be fined one shilling and six pence.

In those same days it was that the "navy was condemned." The two "frigates," "Shirk" and "Fly," were declared unseaworthy, and a tax levied, whereby the State was enabled to procure two new "frigates," one twelve and the other fourteen feet in length.

There is a delightful modesty about the records of the State. Not once are the members disgraced by the recording of large catches. On the other hand, they seem to have taken a keener interest in the minute details of angling than in the amount of killing. They delighted more in rare catches than in the feats of the professional fisherman.

In 1789, it is recorded by order of the governor that "Ben Scull, the prince of fishermen, produced a trout which he caught in Schuylkill, that measured fifteen inches." This was an unusual catch, for trout were few in Schuylkill. We wonder why the word "produced" is used in the record. Why did not the governor order it recorded that Ben Scull *caught* such a trout in Schuylkill? Was it because he was a conservative official who dreaded to state on his own authority that Ben Scull really did catch such a trout, and did he word his record purposely so that any skeptics among us may imagine that Ben was a Prince of Jokers as well as fishermen, and that the fish which he "produced" was caught elsewhere than in Schuylkill?

Another record tells us of the taking of a shad at the Falls of Schuylkill—a strange thing, for shad seldom ventured so far above tide-water. But the only fish story, as "fish stories" are defined to-day, is recorded on the fifth of October, 1791. A tale it is that seems worthy to go down to history along with the adventure of Jonah with the whale and the encounter of Regulus with the big sea serpent. On that date, says the record, "a four foot sturgeon boarded one of the frigates." After something of a struggle the boarding party was captured, and was later served up as a "delicious repast." We might wish the chronicler had been more explicit, but perhaps after all it is better that he should leave each of us to picture for himself the "boarding of the frigate," the surprise of the crew, the slimy struggle, and the final capture.

These are the incidents that tell us of the joys of the citizens of Schuylkill. What delight they must have experienced in telling these tales in the city, and in talking them over at succeeding dinners! There were streams within a hundred miles where they might have caught an abundance of trout every day. There were others where sturgeon innumerable might have been taken after the methods of the sturgeon



INTERIOR OF "CASTLE" AT RAMBO'S ROCK.

fisherman; where the citizens might have posed at the day's end with disgracefully large strings hanging at their backs; but the citizens of Schuylkill were sportsmen. And who doubts that they drew from their occasional adventures, their consciences clear and their appreciation undimmed, many-fold the pleasure that comes to the shameless maker of records for great slaughter?

Changes there have been in the State, but they are slight and have ever been the inevitable changes of time, never those of strife and revolution. For the "contemplative man's recreation" does not breed strife, but peace and good-fellowship. External changes have been the most marked. In the early years of the century the old log Castle, which had served its purpose well for more than three quarters of a century, was taken down and in its stead was built a frame structure. This stood at the Falls of Schuylkill, and there the citizens expected it should stand forever. But once they rallied for the opening of the season, to find not a single ripple where the historic Falls had been. A company of sordid men, who placed dollars above sport, had built a dam below and backed up the waters of Schuylkill so that a currentless pond had replaced ripples and rapids. Then began a scarcity of fish, and the governor called together his council.

Investigation proved that fish could not pass the dam, and the council decided to move the Castle to a point below that obstruction.

So the Castle was carefully taken down and moved to Rambo's Rock, where nothing obstructed the movement of fish from the sea, and for years the State made merry. Then came a season when the waters of Schuylkill gave out an evil smell, and dead fish were found floating in the eddies, and the most tempting of baits brought not a single bite. A great oil syndicate had begun to throw its refuse into the stream. Again the governor and his council decided that the Castle must be moved. This time it left its native Schuylkill and was taken to the Delaware, where the Castle stands to-day, the oldest wooden building about Philadelphia. Near the Castle now stands another and larger building, which citizens call the "Clock House." It is a sort of auxiliary castle, that may be heated in cold weather. Here a member may come in the heart of winter, if he is hungry for a beef-steak of his own broiling. Here he may bring his wife and daughters, who are not permitted within the sacred precincts of the Castle. And here he does bring them now and then to eat a lunch which he himself cooks after the manner he learned when an apprentice to the company.

But while these few external changes have taken place the State's internal peace has remained unbroken. Its governors have held for so many terms each, that the presidents of the United States have been more numerous. The term of Hon. John Wagner, who after a score of years has just retired from the governorship, in favor of present Governor W. Fisher Lewis, is not exceptional. Its rules have varied but little, and its spirit not at all. Its fishing still begins in May and still closes in October. Witness its opening:

It is the first Tuesday evening in May. Seated at a desk in the governor's headquarters (which happen to be in a Philadelphia sky-scraper) is the caterer. He is not a professional caterer, mind you, but a full-fledged citizen of the "State in Schuylkill." More than likely he is a millionaire, yet on this occasion he must cater to the other citizens of this most democratic State, even to the extent of preparing food with his own hand. About him are seven apprentices. These too may be millionaires, but they are humble individuals to-night, for it requires obedience and humility, together with length of service, to render an alien worthy of citizenship in the "State in Schuylkill." The apprentice must be faithful in little things to prove that he is worthy to be trusted with so great a boon as citizenship, when one of the thirty members shall leave a vacancy. To the caterer's desk are coming the citizens either in person or by proxy, to say whether or not they will be present at the castle on the morrow when the fishing season opens. At last all are accounted for, and the caterer sends out his apprentices to various markets, and his day's work is done. It is imperative that each member shall say to-night that he will or will not attend that banquet on the morrow. If one fails to announce his intention and afterward decides to attend, he must take with him a bottle of wine and a steak, or there is no appeal from the caterer's decree that he pay five dollars' fine.

It is Wednesday morning now. The castle, which has been closed for many months, is open wide. Smoke issues from its great chimney. About the fireplace in an adjoining kitchen the millionaire caterer and his apprentices are gathered, all in white aprons. Some citizens have already arrived and gone out in the navy to catch perch. Others are arriving, and preparing their



FIREPLACE IN KITCHEN OF THE
"HOUSE ON THE DELAWARE."

tackle. Two or three have gone down stream to the boat of a professional shad fisherman, and are making arrangements whereby they shall be permitted to make one pull at the nets in front of the castle. This is not because they have confused professionalism with true sport, but because they want to buy a shad for dinner, and like the novelty of one pull at the shad fisher's net.

Within the Castle a member whose services have been enlisted in behalf of the caterer is busy brewing the punch—a mysterious beverage whose proportions are secret to all save the citizens, to whom the recipe has come down from pre-revolutionary caterers. Other members are arriving now. Some go to fish, but others play at shuffleboards, or pitch quoits, or stretch themselves under the trees. For in these later days the fishing is not the best in the world; and to tell the truth, this getting out of town, this being away from clients and customers and boards of directors, away even from hired servants of office and dwelling; of breathing the pure air from the Pennsylvania hills, of looking at the ancient Delaware and drinking in the charming quaintness of colonial life, is enough to gladden the heart of the most blasé millionaire, whether he catch fish or not.

Now members are returning from the first hours of their fishing, and apprentices are busy dressing perch. There are no servants, mind you. The members and apprentices of the company are sufficient unto themselves. These perch the busy caterer and his chosen assistants are frying in the long-handled pans that have come down to the State from the earliest days of the Schuyl-

kill Colony. Nor are they fried as you would fry them at the camp fire, nor as you might see them fried in your kitchen. It is a rule that no knife or fork shall touch a fish while in the pan. So when the under side has attained the proper shade the caterer gives a peculiar twist of the wrist which tosses the perch into the air and causes it to alight again in the pan, the brown side up. This he learned when an apprentice, for only one who attends every fishing day during his apprenticeship and diligently studies the arts of the caterer is eligible to citizenship in this State. Some members have, perhaps, gathered in to watch this time-honored bit of skill. They cry "Bravo" without stint when the perch are neatly tossed, but heavy silence chills the marrow of the caterer when his hand shows lack of practice and a fish falls into the fire.

A busy forenoon it has been for this functionary. There has been much work to do, as we see when the dinner-horn is sounded. For the table, at which the governor presides, and where the apprentices serve, is fairly loaded—loaded with the dishes that graced its cloth in days when it stood in the old log castle; in the days when General Lafayette sat there. There are the fried perch, the planked shad, and the great juicy, broiled steaks; there is the barbecued pig, brought ever to the table on the old, old platter, once a part of William Penn's dinner service; there is the lobster salad, the punch

and the lemonade. There is no champagne, no dessert, and no cigars. For fishermen plain and simple foods are sufficient; champagne and desserts are too luxurious. So also with cigars; but if any member cares to smoke a pipe at the dinner's close, a pipe will be forthcoming.

The lunch is long, for the fishermen are hungry, and no one hurries. When it is done the governor announces the season's beginning. From this time on until October every Wednesday will be a fishing day. Wednesday would not seem a propitious day for an outing, yet during the past summer not one fishing day did the members fail to drop work in the city and gather for sport and rest and lunch at the "Castle on the Delaware." It is one of the charms of fishing that it may be pursued as fiercely or as calmly as one likes. It offers recreation, and outdoor life and pleasant excitement in any case. So the citizen of Schuylkill finds happiness in the territories of his State, whether his mood be to rest and breathe the fresh air, to wander through the woods for the sweet calmness so hard to maintain in the heart of the multitude, or whether he be bent on making a record for catching bass and perch. And in the midst of these ancient associations—this make-believe, if so you choose to call it—he finds a charm that impels the sacrifice of business, and engagements and money, for the sake of his ancient and honorable State.

GOOD AND BAD BITS

By W. S. Harwood

A FRIEND of mine, Prof. M. H. Reynolds, a member of the Minnesota State Board of Health, and veterinarian of the Experiment Station of that State, showed me through his chamber of horrors one day, chief among the objects therein being a series of cruel and unnatural bits, from which photographs have been made to accompany this article. These are not the only types of cruel bits in the world, for wherever there have been men without the intelligence or the patience

properly to break and train horses, there have been found men with inquisitorial ingenuity to invent means of equine torture. Yet some of these bits will illustrate that the spirit of cruelty is not yet dead in the world, and that however humane the generation, there remain men who fail to use the kindlier and gentler methods of controlling the dumb brutes placed in their care. I do not doubt, however, there are a good many men who now and then put a savage bit into some favorite roadster's



THE GENERAL NERVE SYSTEM OF THE
HORSE'S HEAD.

mouth in order that his fiery temper may the better be curbed, without realizing the extent of the cruelty they are practicing, and with no other intention than to make the horse safe to drive. They should think twice before they inflict needless pain upon a faithful animal.

The inner portion of the mouth of a horse, the delicate membrane of pinkish or somewhat darker hue, has a mass of delicate nerve filaments spreading over its entire surface. These nerves are very sensitive to the touch, and any sharp or unusual thrust upon them causes intense pain. This pain is carried by a set of inner nerves, as well as by a set that runs along under the jaw, up the side of the jowl, and thence into the very center of all pain, the brain, between the slender, sensitive ears. It is difficult for any one to say just where the seat of pain is—whether it is in the finger which you bruise or in the brain to which the message of distress has been telegraphed; but the question of location is not essential, while the question of distress is all-important. It is very probable, however, that the brain of the horse, through the series of nerves so intimately connected with the large nerve area of the mouth, is the seat of the intense pain which comes with any undue attack upon these nerves. Any one who has had a tooth extracted, or who has had any trouble with an ear, or who

has been bound in the cruel bonds of facial neuralgia, knows how quick and imperative is the connection between the nerves of the head and the brain itself.

If you should cauterize deeply the inner surface of the horse's mouth so that all the nerve centers were seared over, no doubt the pain of a cruel bit would be abolished; but, at the same time, the sensitiveness of the horse to the guidance of its master would be lost, and the value of the bit would be gone. Yet precisely this may happen after a long use of some hard and cruel bit—it may at last so callous the mouth of the horse that it does not hurt him in the old way, and he refuses to respond to the rein. The nerves are all essential; they should be kept in their natural state if the horse is to be a safe, tractable, well-behaved, well-governed animal. The training of a horse is, to a greater extent than many people believe, the training of his nerves, or, to put it in another way, the training of his disposition, which, in the last analysis, is very much the same thing.

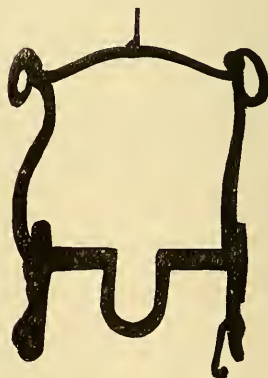
If a horse's nerves have been kept in a healthy, normal condition; if he responds quickly to the various incidents of the horse life; if, in a word, he is just a natural horse with natural horse likes and dislikes, he is the ideal animal in so far as tractability is concerned. And on tractability depends much of the horse's usefulness, much of his value. If his nerves, and particularly the nerves of his mouth, which are so quick to



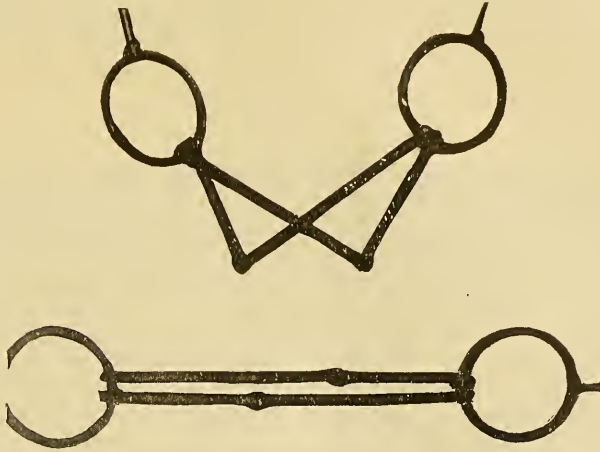
THE MEXICAN SPADE BIT, CRUEL OR NOT
ACCORDING TO EMERGENCY AND THE
SKILL OF THE RIDER. A BUCKING
PREVENTATIVE.



BITS THAT CONTROL WITHOUT CRUELTY.



TYPES OF CRUEL BITS.



SAVAGE BIT, OPEN AND CLOSED.

take the message of pain to the throbbing brain, are not normal ; if they are subjected to undue irritation ; if, at last, they become immune to all save the most brutal and vicious attacks, then the horse becomes an abnormal creature, he loses one of his most essential elements, he is fit for the cheap horse market, where only second-hand wares are offered for sale.

So in this question of inhumanity to horses by means of bits that are cruel, it is not humaneness alone that is to be considered. That, indeed, is the higher and governing element in the question, but beyond that is the question of dollars and cents. The man who habitually uses a cruel bit upon his horse's mouth not only does violence to all that is noblest and best in his own nature, but he inflicts a direct damage upon his horse from the standpoint of value. A well-bred horse is a delight ; a well-bred, well-broken, good-dispositioned horse is even more than a delight—he is an entry on the right side of the bank account.

I asked Professor Reynolds what he thought about the bitless horse—was a time coming when the horse would be driven without anything in his mouth, controlled by some sort of a band about the nose and jaw? He responded to my question by this proposition:

“There is no horse of good, normal spirit who may not at some time become frightened. He may even be more than frightened; he may become frenzied. Just as a

lot of sensible, well-behaved, sedate human beings may, in the presence of great danger, become converted into an unruly, mad mob, so a horse, under peculiarly trying conditions, may lose his head. The best horse in the world has not greater self-command than the best man, surely. Under such conditions it is not possible to restrain a horse merely by use of a strap; there seems to be nothing but the metal bit which will hold him. Even with the use of a bit there are times when a horse, to use the common expression, takes the bit in his teeth, and then there is no stopping him until he has run his course. For very many reasons the bitless driving would be desirable, and under normal conditions it may be that it will become successful.”

I do not pretend to be an expert in the matter, and would hesitate to say that any new invention in this line was unsuitable, but Professor Reynold's opinion is certainly worth weight.

There does not appear to be any tenable ground upon which the use of a harsh bit—one of these cruel, merciless refuges of the mean man or the cowardly one—is warranted. Perhaps there are times when some bit other than the humane one is permissible, but such times are very rare—so rare as to afford merely an exception to the general rule of humaneness which should be the governing rule in the heart of every one to whom has been intrusted the care and the driving of one of the noblest animals God has given to man.

UNCLIMBED PEAKS OF THE ROCKIES

By A. C. Laut

MOUNTAIN climbing in the Canadian Rockies virtually dates from the one fatality among climbers in these new-world Alps. The death of Mr. P. S. Abbot, an intrepid member of the Boston Appalachian Club, which occurred on Mount Lefroy, indirectly gave the impetus to climbing in the Rockies that last year resulted in more ascents and better records than in any mountain region outside Switzerland. Mr. Abbot's companions on that fatal climb, four years ago, refused to be balked of their victory, and exactly a year after, on the anniversary of the accident, they were avenged on the peak by a successful ascent. This time the climbers had the services of an experienced guide, brought from Switzerland. The safety with which the formidable peak was scaled under professional guidance pointed a lesson to all concerned. Thenceforward, professional guides became an institution in the Rockies.

T. E. Wilson, the outfitter of Banff, who has directed important explorations, from the finding of Roger's Pass through the Selkirks, in the eighties, to the recent expeditions of Mr. Walter D. Wilcox, of Washington; Mr. Charles S. Thompson, of Chicago; Dr. Norman Collie, of London, and others, has now to supply guides who can not only thread the tangled forests of the under-slopes, but circumvaliate the dangerous crevasses of steep, glacial ascents. Trappers, who formerly idled the summer away, have followed Wilson's example and become guides. Even the prospector of ambitious dreams, realized that the tourist was a better gold-mine than a doubtful prospect. At last have come the Swiss guides themselves—six or eight of them; for a mountain is a mountain, whether in Switzerland or British Columbia, and whatever can be climbed in the Rockies, is climbed by these stalwart men from Zermatt and Interlaken.

The Swiss declare, except for minor differences, that climbing in the Rockies and the Alps is practically the same. The

Alps are peopled and dotted with hamlets. The Rockies are desolately grand, tenantless, and pathless as an ocean. The battle on lower slopes with windfall, burnt timber, matted undergrowth, and a forest that has been "avalanched" down a mountain side into every imaginable, knavish contortion of *cheval-de-frise*, is not known in Switzerland. In the Rockies, before the climber has reached the real difficulties of ice and steeps, these things have exhausted the freshness of his strength. The summits of the loftiest Alps are higher than the loftiest Rockies by three hundred feet; but owing to a heavier snowfall, the snow-fields and glaciers of the new world's Switzerland are vaster and more magnificent, than anything in Europe.

Apart from these differences, the Alps and Rockies present the same matchless charm of a real and living wonderland, the same brilliancy of coloring in high tarn and glacial torrent, the same impetuous avalanches and wind-blown cataclysms, the same cavernous ice grottoes and broken sky-line of fortress battlement and snow-crested peak. Considering the similarity of the regions, it is not surprising that more climbers should yearly search the Rockies for new and unconquered Matterhorns.

The season of 1899 witnessed enthusiastic work among the climbers in the Rockies. Peaks which have defied the best efforts of men with such Alpine reputations as Topham, were this year climbed repeatedly. Mountains once regarded as impossible, were reduced to the proverbial "stiff day's climb for a man," and from "the stiff day's climb for a man" to "the easy walk for a lady." Cascade Mountain, which looms up like a giant bastion across the eastern entrance to the Rockies, and which was considered unconquerable until recently, was climbed again and again by amateurs, with the assistance of only one guide. Rundell Mountain, on the opposite side of the Bow River, erect as a wall on one side and sloping at an angle of sixty degrees on the other, was traversed

up and down from midday to sundown, by Mr. Wilcox. Sulphur Mountain, the forested ridge running parallel to Rundle, has become an afternoon walk; but the slopes up the north end, or up past the

by Dr. Collic, of London, who describes the climb as a "splendid dolomite, necessitating rope, and step-cutting for the last thousand feet." There are many lofty peaks like Peechee and Inglismaldie

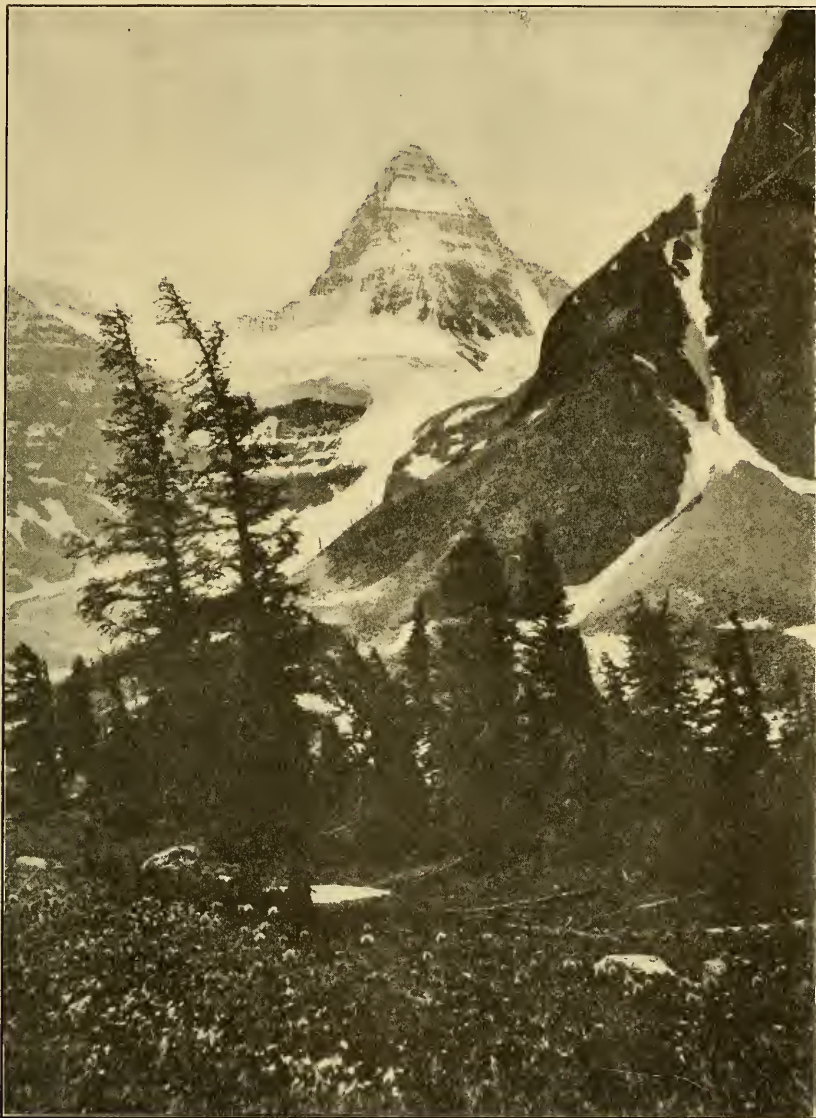


Photo by courtesy of W. D. Wilcox.

MOUNT ASSINIBOINE FROM THE SOUTH, SHOWING THREE FACES.

hot springs, must be followed, otherwise the walk may become a catch-as-catch-can up perpendicular cliffs. Mount Edith, the sharp pinnacle towering up behind Cascade, was ascended for the first time

in the Canadian National Park region, which are still untrodden; but there is only one which has defied the most determined efforts of the best climbers, and that is Mount Assiniboine, twenty miles



PACK TEAM SETTING OUT FOR MT. ASSINIBOINE.

south of Banff, as the crow flies; fifty-two miles by forest trail.

In shape, Mount Assiniboine closely resembles the Matterhorn. It stands up from the surrounding valleys in a great, many-faced pyramid, the apex, or last 2,000 feet, being sharply conical at an angle of sixty or eighty degrees on all sides. Its altitude is estimated from 11,800 feet to 12,600 feet. From the north side, the base of the peak presents a gradually rising glacial slope, from which the tiered ledges shoot up suddenly in three frowning faces. Two of these are overhanging, and pour down continual avalanches of snow and rock, so that only one of the three faces on the north side is approachable. On the east is a sheer precipice of black cliffs; the black cliffs so hateful to all guides—"for where snow can't stick, how can a man?" On the west is a long, sharp, ridged sky-line leading under a beetling, pinnaced shoulder; but avalanches shoot over this ledge as from a flume, and this side is also unapproachable. On the south the valley is a thousand feet lower than on the north, and the mountain appears to be perpendicular. But on closer inspection, the upright wall is found to be a succession of receding ledges. The rock is crumbly, and a way might be discovered up the south side. The great difficulty here is the nature of the ground. The valley is so steep and shaly, with a perfect pitfall of interknitted timber, that a man can scarcely get footing, much less a pack-horse with provisions.

This Matterhorn of the Rockies was first seen by Dr. George Dawson, of the Geological Survey, and named by him after a tribe of prairie Indians. In 1893, Wilson,

the outfitter, and Mr. R. L. Barrett, a Yale man, visited the peak. A year later, Messrs. Porter, Wilcox, Barrett, Smith, and Allen—all climbers of well-earned reputation—made a thorough reconnaissance of the ground, but returned without attempting what was apparently so impossible. In 1899, Mr. Bryant, the explorer of Labrador Falls, Mr. L. J. Steele, of

England, and Mr. W. D. Wilcox, camped at the foot of Assiniboine. Bryant and Steele succeeded in ascending to an altitude of 10,000 feet. Here they desisted, and none too soon. On a steep slope Steele lost his footing and shot down, carrying Bryant with him. By a dexterous movement the former thrust his ice-ax into the rock and brought the downward rush to a sudden stop; but so swiftly were they going, that Bryant dashed right over Steele's body, and only for the rope must have gone down six hundred feet. None of these trips were made under favorable conditions. Swiss guides were not taken to aid in the ascent, and the avalanches were still frequent.

In 1900 two young Chicago men, Wiloughby Walling and his brother, climbing for the first time, made exceptionally good records on Mount Lefroy, and on Mount Victoria, the snow palisade to the right of Lefroy. Without any idea of success, where so many experienced men had held back, they thought that Assiniboine had not been fairly tested, and decided to see the peak. The trip was timed for the month of August, when the heaviest avalanches should long since have fallen. Three Swiss guides, two of whom cannot be excelled for rock and ice work, were taken. Two of Wilson's trappers were also employed to lead the way through the heavy forests, where faintly blazed trees offer insecure guidance for inexperienced men. Fourteen pack and saddle horses, with provisions for a week's stay, were in the cavalcade that filed out of Banff.

Going out, the guides chose what is

known as the Heeley Creek trail, which crosses two divides over 7,000 feet high, one of which is so steep it is difficult to lead horses down without a series of somersaults to the valley bottom. In places a miniature landslide carries horses and men down till boulder or timber stops the fall. After three encampments, a fourth camp was pitched at an altitude of 7,000 feet, on the margin of a glacier-fed lake at the base of the mountain proper.

Leaving the trappers in the valley, the climbers and the Swiss guides started, between 2 a. m. and 3 a. m., up the glacier slope, for the summit. The three faces of the north side were to the fore. To the right and to the left were the overhanging shoulders, down which poured avalanches. In the center the grooved channel of a watercourse or gully seemed to give a lead to the summit, or to that part of the summit where the three angled faces converged into the central peak. Looking through their field-glasses, as soon as daylight made this possible, the trappers saw a line of roped dots black against the snow, gradually diminishing as they ascended, till they had left the snow for the naked rock, where it was too steep for snow to stick. The climbers seemed to be rounding cautiously and laboriously

to the left shoulder. Here the rock was rotten, crumbly, and slippery with fresh thaw. For first-year climbers, the Chicago men were doing fast work. Before midday they were 11,100 feet above sea-level, or 4,100 above their camp. Where the center plane converged to the left, the progress became so slow as to be almost imperceptible. There was a glare ice slope at from sixty to eighty degrees, trickling with rivulets, and down this a snow-slide might at any moment sweep. Every step had to be cut in the ice, and fast as it was cut the thaw washed over, obliterating every trace. Above, the slope steepened as it rose, till almost vertical. Here, only one hundred feet were made in an hour and a half.

There is a time when every guide must speak plain truth about the danger of going on, or else guides would rightly be held responsible for fatal accidents; and in the Rockies, where there is no law compelling guides to qualify, there is especial need for caution. The Swiss pointed out the danger, and as the climbers were out for sport, not tragedy, they showed their good sense by at once turning back. They had bettered former attempts by 1,100 feet, and had done pioneer work in proving at least one route unfeasible.



MT. LEFROY AND VICTORIA GLACIER. LAKE LOUISE REGION.

The journey homeward was made by the White Man's Pass, east of the outward trip, an easier but densely forested trail. When one day's travel distant from Banff, the trappers, who were the only members of the party with any forest lore, were requested to halt and skin some game shot by the others. Then a mistake was made which nearly cost six lives: the trappers, with the pack-horses and provisions, were left behind—a mistake which any city man, especially any man ignorant of the treacherous, intricate, obscure labyrinths of a Rocky Mountain forest, might have made. They were but twenty miles from Banff, along the course of the

gone far before we could tell, by the trampled grass, that the party ahead had been driven to make a wide detour and hadn't found their way back to the trail. What were we to do? If we kept the trail, they might really be lost. If we left the trail, we might miss them. The woods were so thick you couldn't see the length of a horse head, let alone any peaks to give an idea of direction. We decided to trace them, and followed their marks mile after mile, away from the Banff trail, doubling back and forward round windfall, zigzagging in a dozen different ways without seemingly getting any nearer. It was just a confusing haze, round and round.



MT. RUNDLE (10,000 FEET), CANADIAN NATIONAL PARK

Spray River. What easier than to follow that river into Banff? The climbers and the Swiss guides rode forward, confident of soon reaching Banff. They were soon hopelessly lost.

"We saw them disappear in the wood," said one of the trappers, "and by the time we could finish and get the packers started, we couldn't get any answering signal, though we shouted and fired off guns. The fallen timber was piled higher than a horse, and in lots of places, where the trunks were criss-crossed five and six logs deep, we had to leave the trail, skirt through the forest, and chop out trees too high for the packers to jump. We hadn't

When we shouted, the thick foliage muffled our voices. What tracing that trail meant, with loose pack-horses scudding every which way, you may imagine. At length we began to see the rip of spiked boots across logs, and judged they had abandoned their horses in the hope of climbing over the windfall and walking to Banff. The last trace we could find was the mark of one of the guide's pegged boots. By that we thought they must have separated. We searched everywhere on that bank of the Spray, but couldn't make out a mark along, or back from, the river.

"We knew they must be within a radius of twenty miles, so for two days and nights

we built bon-fires in a circle of many miles, fired off guns, and yelled till we were hoarse. Then we decided either they must be at Banff or else we must go to Banff for a larger search-party. We didn't realize their plight till we reached Banff."

The plight could hardly have been worse. The tangle of windfall had, as the trappers interpreted from their sign, compelled them to dismount and lead their horses. As the brush became thicker, some of the horses were turned loose, others tied, and one was led forward. It presently served a good purpose. The difficulties of going through such a forest cannot be exaggerated. Un-

less fight was continued the next day, till prolonged fasting began to assume the very real horrors of probable starvation, and weakened bodies refused to do more. There remained one hope. If the Swiss, whose strength held out better than the constitutions of the city men, could possibly push on and find a way to Banff, a rescue party might reach them before it was too late. This was done, the lost men meanwhile killing the horse that had been led forward, and subsisting on its flesh. When found by Wilson, who came with all speed from Banff, they had kindled fires and were throwing their cartridges



MT. SIR DONALD, IN THE SELKIRKS.

less a path be chopped, the interlaced branches bar the way like the wires of a cage. Fallen trunks are piled in a barricade. Giant spruce, fir and pine shut out light, so that a deep gloom permeates the forest, except on sunniest days. The undergrowth is higher than a man, and hides a comrade but a few feet off.

Throwing aside every encumbrance, to fight a path forward, and forgetting that their guns might prove the only means of getting food, the lost men dropped their carbines and toiled until fatigue compelled cessation. Superfluous, and utterly exhausted, they bivouacked in the forest. The same hope-

in the flames to let their whereabouts be known.

Such was the attempt to conquer Mount Assiniboine in 1900. For seven years climbers struggled with the Matterhorn, and Assiniboine will yet bow its proud head to the all-conquering foot of the climber. The Swiss guides, whose estimate of altitude is more accurate than the most of aneroid readings, say that above the 11,100 feet climbed by them, there were at least 1,500 more feet to the actual summit, making Assiniboine's total altitude 12,600 feet.

West of the Canadian National Park



Photo by L. J. Steele.

ON SPRAY RIVER,
en route FOR ASSINIBOINE.

is a galaxy of peaks. Lefroy, the helmet peak to the left, and Victoria, the wall of snow to the right of Lake Louise, both 11,000 feet above sea-level, and 5,000 to 6,000 feet above Lake Louise, were climbed last summer with comparative ease; and of the other peaks about the beautiful expanse of emerald water, Goat, the Saddle, St. Prian, and the Beehive, have become a walk for a lady. Behind this cordon of summits, south and east, is a wonderful crescent line of mountains, known as the Ten Peaks of Lake Moraine. Easy access can be had to them by four hours in the saddle, with packers for a few days' provisions; and the Lake of the Ten Peaks is well worth the trip. All but two of the Ten Peaks are absolutely untrodden, all but two are above 10,000 feet high, and one at least—the Deltaform, a triangular point shooting vertically up from lateral pinnacles, with measureless snow wedged all about—is higher than Mount Assiniboine and of as difficult a nature. In the same region are Mounts Temple and Hungabee—magnificent masses of granite, scored with avalanches and covered with snow.

Thirty miles north of Lake Louise, beyond the valley of the Bow, is a glacial area fifty miles long and from five to seven broad, which is the source of three great rivers—the Saskatchewan, Athabasca, and Columbia—flowing to the Arctic, Atlantic, and Pacific. Here are some of the highest peaks in the Rockies. Thanks to the tireless efforts of Appalachia and Alpine Club men, this region is becoming better known. In August, Dr. Collie and Mr. Stutfield, of London, and Mr. Spencer, of Bath, spent some weeks exploring the extreme south-

western hem of it, and though they made only thirty-five miles, they were rewarded by discovering the highest peak yet known in the Rockies—higher than Brown and Hooker, of fabled but exploded fame. The summit is to be called Bush Peak, after Bush River, which rises at its base.

Still farther west, in the valley of the Kicking Horse River, are fine groups for climbers: Mount Stephen, formerly invulnerable, but scaled many times in recent years by men, and twice by ladies; Cathedral Mountain, to the left, blocked, massive rock and ice, exactly like a turreted basilica, which has been conquered between 9 a. m. and 5 p. m. On the opposite side of the river is the green bench of Mount Field, the real summit not being visible. This is to be recommended, not for the climb, but for the magnificent view from it to the north, where more than eighty glaciers are to be seen without a field-glass.

Of the lofty peaks in the Selkirks, few are under 10,000 feet. Sir Donald—10,700—offers the greatest attractions and the greatest difficulty. This peak was scaled ten years ago, then given up by all comers as hopeless. Last year it was scaled by Mr. Vaux, of Philadelphia; Mr. Scattergood, of the same city; the Messrs. Outram and Butler, of London, and Mr. Stutfield. Each climber, in the order mentioned, profited by the experience of his predecessor, till the last succeeded in avoiding the slow ice work, which had delayed the others, and made the ascent between 3 a. m. and 9 a. m., and the descent before 2 p. m.

In spite of all that was done last year, a mere beginning has been made in Rocky Mountain climbing. The whole region at the source of the Bow is virgin ground. The Ten Peaks of Lake Moraine await the climber. The ranges north of the Kicking Horse River have not even been explored. The Ottertail Range, south of the river, and the long range north, are both unknown; and west of Sir Donald, in the Selkirks, behind the Bonny, or Purity Glacier, on Flat Creek, is a region which a surveyor, who has been in every part of America, describes as the most marvelous combination of glacier-clad mountain, waterfalls and marble canyon, that he has ever seen. Here is an undiscovered world awaiting its Columbus.

A THEORY OF TEACHING GOLF

By A. DeWitt Cochrane



A AND G.
AT REST.

THAT nine-tenths of the beginners at golf are taught upon an absolutely wrong system, is a wide statement, but it is true. They are loaded up with a whole family of clubs, of which they do not even know the names, much less the uses; taken down to the first tee, and told, or shown, in an exceedingly confident manner by some one to whom it has be-

come easy, how to drive. Having driven off the tee, and made a more or less unsuccessful stroke, the neophyte follows with a series of other strokes, with the conditions and problems of which he is entirely unfamiliar, and in the end he reaches the last green, disheartened and uncomfortable; with the idea that he is about the worst kind

asking him to read an obscure passage of a difficult author—we teach him the alphabet. We don't start our boys driving four-in-hands. In drawing, we teach a pupil first to make a straight line; we do not expect perspective, color, and landscape atmosphere from him. Yet the novice golfer is taken direct to the tee, as it were, blindfold, and set the task of an expert.

In my opinion, the way to begin is to give him one club only, and that a putter. Take him, not to the tee, but to the putting green. There, with his mind concentrated on one club, instead of diffused and puzzled with several, he fully comprehends in a few seconds what he has to do. He simply has to hit that ball so straight, and with such force, that it will travel from where it is (say at first three feet) into that little hole; and he is to keep on attempting that until he can do it. By the time he can get it from the edge of the green to the cup fairly well, every time,



B AND F.



C AND E.



D.

of a pupil; and the use of that bagful of clubs with uncouth names is as near to the unattainable as can well be. By very slow degrees, after many moons of persistence, he begins to conquer the game—but at what a waste of time! The whole process of his beginning has been wrong. We don't begin a child's education by

he will at least be master of one portion of the game.

Then go through the same process in "approaching," gradually lengthening and making more difficult the lessons, and only then may the learner be allowed to drive from the tee. He will be ready to do so with intelligence. The advantage of the

working backward from the green to the tee is obvious; all has been made clear to the player's understanding—he does not then drive from the tee into chaos, but into conditions well known, and with which he is perfectly able to cope. The theory upon which I insist is that all progress in golf is over a series of straight lines—the easiest exemplification of which, in golf, is the putt. Even a curved line, in its final analysis, is a succession of broken straight lines, which form the curve. The full swing of any iron club divides into a

bent, body turned slightly on hips, head bent down, and the head of club, left hand, and left shoulder, in a line. Making another step, raise the club (C) as far as the left arm extended will permit without moving the body, with knee slightly advanced, left shoulder inclined a trifle more; the head of club, left hand, and left shoulder as before. Coming now to the last movement of the upward swing (D), the left arm, extended, raises the club by an inclination of the left wrist towards the body, the club now assuming a position parallel



H.



I.



J.

number of separate movements, each one forming a given segment of the curve.

In putting, which I recommend as the beginning of all teaching, the stance has very little part, except it is essential that the position be fairly free, not cramped, to allow the club to move back in the continuation of the direction which you wish the ball to take. This applies to almost all putts, whether on a level or a rolling surface. In driving, on the other hand, the body must not move from its first position; you may twist on your hips, but not your feet; and play from your left foot. If you move your body, you must move your head.

By way of illustration, we will start from "at rest," for a full shot drive, with the ball in a position equally distant from each foot.

(A) Gripping firmly with the left hand, we carry the club as far back (B) as the left arm straightened will permit without moving the body. Keep the knees slightly

to the ground and the direction of flight. Bring the club down through the reverse movements (E), (F), (G), respectively, and this finishes half the swing. Assuming, again, the position (A), (G), start off afresh, using the right arm as the continuation of the club or radius, the right shoulder as the center. The weight must necessarily be thrown a little on the left leg, the body twisting on the hips. The position of shoulder to ball in (H), (I), (J), is the right hand and shoulder now where the left hand and shoulder were in (B), (C), (D). Arriving at the last position (J), note that the right arm is not extended as in the position (D), because it is the end, not part of the middle, of a stroke, and therefore less depends on it. I obtain the best results by keeping my left foot firmly on the ground, with little regard to the position of the right. Let me, in conclusion, add one general observation from long practice: The straighter your back, the easier is your swing; and the easier your swing, the longer the ball.

AMERICAN GAME PRESERVES

By George Ethelbert Walsh

WITH the gradual extinction of our wild game and birds, and the destruction of their natural habitats in our woods and forests, opportunities for hunting are becoming more limited. Even the preservation from extinction, of a few of the most interesting species of our native fauna, is assuming paramount importance.

The establishment of preserves and zoological parks by States and cities, as homes for the few remaining specimens of some of our rare birds and animals, comes none too soon. Within another decade or two, it would be impossible to stock them. Not

tions are made nearly similar to their natural habitats.

It is the aim of zoological gardens to provide their inhabitants with woodlands, forests, grassy plains, and rough country, representing in miniature the larger tracts of nature's primeval country. For most of the birds and animals these substitutes prove satisfactory, and they breed and multiply therein.

But, supplementary to the public zoological gardens, and in some respects superior to them in the preservation of certain species of native fauna, a large number of private game preserves have come into



ONE OF THE BUFFALO YARDS.

only does this apply to the American bison, whose tragic story has so often been recounted, but to the Maine caribou, several species of native deer, to the bald eagle of the Rockies, and the beautiful ibis and flamingo of our extreme southern forests. Fortunately for the world of science, by reason of these refuges, and the efforts of private citizens, none of these products of our plains and woods is likely to become extinct, unless it refuse to breed and multiply in semi-captivity, where condi-

existence in the last twenty years, and their example is constantly stimulating other similar plans. The majority of these great game and hunting preserves are located in the East, and they include fish and game of every conceivable kind, both natural to the country, and imported from the private preserves of Europe. The immediate object of these private game preserves may be to provide their owners with good hunting; but most of them accomplish another object which has more than personal in-

terest. The game therein is protected, and so long as the preserves are permanently maintained, the birds, fish, and animals in them will be in no danger of extinction. In respect to some of our rare animals, these private domains have afforded an asylum beyond the possibility of any zoological garden to accomplish.

The preservation of the herd of buffaloes by the late Austin Corbin, in his private New Hampshire park, is a case in point, and a distinct gain to science. The fact that the few animals of this herd brought to Van Cortlandt Park, New York, soon showed signs of disease and homesickness, and had to be taken back to New Hampshire, is good evidence of the need of these large private estates. The founder of the New

A large portion of this wide domain, especially near the borough of Newport, is enclosed by a stout wire fence eight feet high, and nearly thirty miles long. The park offers a great variety of wild, picturesque landscape, and it is the natural home of birds, fish, and animals. It is rolling and mountainous in parts, with small ponds, lakes, and streams of water flowing through it, and is bisected by a spur of hills which belong to the Blue Mountain range. Some of the high elevations are heavily wooded with the primeval forests of spruce, hemlock, pine, fir, birch, maple, and beech. There are bold, massive spurs of rocks overlooking beautiful, placid lakes; dense forests of trees which eternally shade the ground, and in whose depths wild game abounds;



BATTLING BULL ELK (WAPITI).

Hampshire preserve did not raise the herd of buffaloes there for the purpose of providing his friends with large game, but to see if they would breed and establish a new generation.

There are to-day several million acres of wild land set apart for private game preserves in this country, and some of them, in respect to size, beauty, and stock, compare favorably with any similar estates in Europe or elsewhere. In fact, the Corbin Blue Mountain Forest Preserve, in New Hampshire, is probably the largest of its kind in any part of the world. It includes parts of four townships, and covers some thirty-two square miles of territory.

streams that flow through forest and glade, and tumble over rocky precipices, cutting out a rough bed from granite and limestone; and stretches of rolling, undulating fields and open glades, that for some reason Nature has not seen fit to clothe with pine and hemlock. Through the forest section roam all the game-birds and animals natural to New Hampshire. In addition to the natural fauna, the preserve has been liberally stocked with European pheasants, wild boars, mountain sheep, buffalo, Virginia deer, and other desirable game. The trees and underbrush are allowed to grow undisturbed, and it is rarely that the creatures get a sight of man. In their forest fastness

they breed and grow up as wild as if they were living in a country not yet discovered by the white race.

In this great preserve it has been demonstrated that the American bison can be made to multiply in the Eastern States without losing any of his original character-

the owner's death, there were over seventy roaming at will. There has been little or no sickness amongst them, and they have increased steadily. They were not the trained, half-domesticated animals that one sees in most zoological gardens, but as wild, unruly, and full-blooded as any that



BOAR-HOUND PUPS.

istics. It was six years before his death that Mr. Austin Corbin began collecting buffaloes; he purchased seventeen, and turned them loose in the park. From that modest beginning the herd multiplied, until, before

roamed the Western prairie half a century ago.

While many of the private game preserves are owned exclusively by millionaires, there are others, under the supervision of

clubs and associations. One of the oldest of these is located in Pike County, Pa. It was founded in 1870, by Fayette S. Giles, who organized a club called the Blooming Grove Park Association, for the purpose of preserving, importing, and breeding all game animals, birds, and fishes adapted to the climate. In the thirty years of its existence the club has extended its grounds north and south of the original park, until now it covers an area of 17,000 acres, and it leases 4,000 more. Through the preserve run such famous fishing streams as Bright Brook, Taylor's Creek, Shohola, and Blooming Grove. There are three miles of the latter stream, and eight miles of Shohola, in the limits of the park. The place is eminently adapted to the propagation of fresh-water fish, and besides the streams there are some half a dozen lakes, the largest of which is Lake Laura, containing three hundred and fifty acres. It is not unnatural, under these conditions, that the club should have turned a good deal of

small hatchery has been built in the park, where great quantities of lake and brook trout, landlocked salmon, pickerel, bass, and other fresh-water, gamey fish, are hatched. Thousands of young fish are released from the breeding pond every year, to stock the lakes and streams. The fish hatchery is most successful, and thousands of trout are caught every year in the club's waters, without appreciably diminishing the supply.

There is a large breeding park also, in connection with the preserve, to keep it well stocked with game. Deer, ruffed grouse, English pheasants, woodcock and quail, are bred in the space devoted to this work, but they rear their young in a state of nature, in the thick woods. A large part of the park is in its pristine beauty and wildness. Hills, mountains, and valleys are heavily wooded with oak, hemlock, chestnut, cedar, pine, and hickory, and in the interior of these woods, deer, black bear, wildcats, and the smaller fur-bearing animals are found in



YOUNG MOOSE FEEDING.

its attention to the propagation of fish. The streams and lakes were at first stocked with fish obtained from other waters; but this was not found satisfactory, and now a

numbers. In the spring and summer of the year the woods are clothed with the beautiful laurel and rhododendron.

Similar clubs to this have, in more recent

years, sprung up in the Adirondacks and Canada. In the Adirondacks, several hundred thousand acres of woodland are, in the aggregate, set apart by clubs and private individuals for game preserves. The first large preserve was acquired in 1887, by the Kildare Club. Since then, a number of clubs and private preserves have been established. They are stocked with all the game adapted to the climate, and the original forests and wild country are preserved as carefully from the vandal's ax as is the valuable game. One of the largest of these game preserves is owned by Charles Fenton, and in it the deer and bear find ample protection from the gun of the irresponsible hunter. There are 30,000 acres in this preserve, and some twenty men are employed as game wardens. Wild deer are natural to the place, but these have been reinforced by many others, bought for the purpose.

George J. Gould is another possessor of an Adirondack game preserve, which he has enclosed and heavily stocked with game. Although not more than a thousand acres in extent, it makes up in quality what it lacks in size. Many European animals and birds have been put into it as an experiment. The English pheasant has been domesticated and acclimated there so thoroughly that it is necessary to organize shoots every few years, to keep its numbers within limits. The trout streams and lakes of this preserve are nearly as well stocked as is the game park.

Edward H. Litchfield, of Brooklyn, has 9,000 acres in the very heart of the Adirondacks, which he has stocked carefully with elk, moose, deer, rabbit, squirrel, and pheasant. Like all of the other Adirondack preserves, it is ideally suited for the work of preserving both game and fish. High, rolling lands, abrupt mountains, clear purling streams and lakes, and heavily timbered uplands, combine to make all the conditions essential. Nature has been lavish and bounteous in her favors in this region, and no part of the earth is richer in natural fauna and flora.

The preservation of large tracts of the Adirondacks for State purposes, indicates how valuable the forests are for preserving game. There are close on a million and a half acres in New York State alone, set aside for game preserves, and most of it is located in or near the Adirondacks.

Turning to other parts of the State, there



FORAGING FOR HIMSELF.

is, in Dutchess County, a private game preserve of 1,600 acres, owned by Charles T. Dietrich, well stocked with European species of large game. Another park, at Lebanon Lake, Sullivan County, owned by C. W. Chapin, is stocked with deer, elk, hares, rabbits, and feathered game. Over twenty miles of wired fence shuts in this preserve from the surrounding country.

New England has some dozen or more private game preserves, of remarkable size and value. Besides the magnificent one of the Corbin estate, that of Dr. W. Seward Webb, at Shelburne, Vt., is of more than usual importance. There are several hundred acres of this estate set apart for the breeding haunts of wild animals, and in other parts of the preserve some of the finest birds and small game in the world are bred by experts. Moose, elk, and deer are turned loose in the preserve, and bred with the utmost care.

In Connecticut, at the east end of Long Island Sound, E. C. Benedict has one of the largest and finest fish preserves in the world. He has practically constructed an artificial lake on his estate for the breeding of freshwater fish, and it is stocked with thousands of the best varieties.

Going farther north than New England, we find in Canada the same care to create game preserves, and stock them with animals, birds, and fish. The largest club preserve in Canada is Roebervel, and its membership is composed of three hundred leading Americans and Canadians, devoted to the sport of hunting and game preservation. The preserve of the club is in the heart of the Laurentian Mountains, and covers a tract of wilderness fully five hun-

dred square miles in extent. There are over one hundred lakes in this magnificent domain, and parts of the preserve the eye of white man has probably never yet seen. The caribou here roams, and the moose and bear, beaver, otter, and mink are common along the streams, wherein all kinds of fresh-water fish abound. Magnificent scenery, pure mountain air, and Nature in all her rough beauty are found in this Canadian game preserve, where nothing more is needed than the protection of the animals. Little has been done to stock the place with game, and nothing is required in this direction so long as the present inhabitants of the forests and streams are amply protected. It is like a small State, beautiful in its wild ruggedness, deriving effect from topographical features that are common only to mountainous sections of country, interspersed with elevated plateaus, forests, and chains of clear-water lakes.

Another remarkable game preserve in Canada, and one which has no superior in natural scenery and size in the United States, is that owned by M. Henri Menier, the wealthy chocolate manufacturer. This preserve includes the whole of Anticosti Island, in the Gulf of St. Lawrence. Completely surrounded by water, as this preserve is, it offers excellent advantages for breeding and protecting the larger game of Canada, such as elk, deer, moose, and caribou. It is well stocked with these and other game, both large and small, native and imported. A wire fence across the island divides one third of the land into a natural preserve, where the big animals are kept. On the other two thirds, smaller game is found in abundance, and there are

houses and cultivated fields. One can travel forty miles in a straight line on this immense hunting preserve without reaching its boundary. On Anticosti Island the best of the native and imported animals are bred, and given their liberty every year.

The Southern States offer ideal and picturesque places for game preserves, and in the last few years a number of sportsmen have purchased large tracts of wild forest land there, and stocked them with native and foreign game. The magnificent estate of George Vanderbilt, at Biltmore, surpasses anything of its kind in this country, and the game park he owns there is well stocked and kept. At Fairview, in North Carolina, W. Gould Brokaw, of New York, has 30,000 acres devoted to the preservation of game. Foxes, bears, and deer thrive naturally there, but it is noted most for its feathered game. The almost extinct Southern wild turkey here finds a congenial home, and is in no danger of being exterminated. The famous Jekyl Island Club, off the coast of Georgia, has a fine game preserve, where many animals, including the wild boar, are protected and carefully bred.

Our Western States have not yet awakened to the possibilities their natural conditions offer for great game preserves, but in time, as the large and small game tend to disappear, the need of preserving the native birds and animals of the West will be felt. Undoubtedly there will, ere then, spring up among her wealthy inhabitants some patriot, who will undertake to save for future generations the four-footed creatures that have for so many years made the West good hunting grounds.



CROYDEN MT. IN THE FOREST.

A BLUEFISHING PARTNERSHIP

By Clayton J. Kinsley

A HABIT of loitering about the wharf each morning when the fishermen unloaded their catches at West Palm Beach, Florida, threw me in the way of becoming for a single day a financially silent member in the novel fishing firm of Lucius Thomas and his fellow "kid," and gave me a few hours of the most exciting fishing I ever experienced.

On this particular morning I made my regular visit to the wharf in a rather disgusted frame of mind; for on the previous day I had given up good money to the owner of a small catboat in which I had trolled, during an entire afternoon, back and forth and across Lake Worth, a salt-water lagoon connected at either end with the Indian River and Biscayne Bay, and my sole capture had been an ugly thing called a barracuda, which reminded me not a little of the ling of the northern streams. A firm conviction that the fellow who owned the catboat had not cared a picayune whether I caught anything or not, so long as he had caught me for the rent of the outfit, didn't improve matters.

Alongside the dock was a small catboat, and on the deck of it stood the owner, a lanky red-headed son of Alabama, who was splitting and packing in ice for shipment north, a lot of bluefish, Spanish mackerel, pompano, redsnappers and sheepshead which his gill-net fishermen had caught off the ocean shore the night before.

The sight of the fish increased my feelings of disappointment over the bad luck of the previous day, and, making myself comfortable on a post in front of the houseboat, I began unwinding what I imagined was a heartrending tale of woe, in the most sarcastic manner that I could assume.

My sarcasm was wasted. Mental irritation because of a failure to catch fish which were not intended to be converted into coin of the realm, was beyond my listener's comprehension.

"So you kain't ketch no fish?" he inquired, good-humoredly.

"Not a thing," I replied.

"You don't know where to go," was his rejoinder.

I held my peace while the fish shipper went on to tell how only the day before he had loaned one of his boats to a couple of "kids," as he called them, who returned at night with over a hundred pounds of blues. They were going again, and would probably be glad to take me along, provided I would give them all the fish I caught. Without waiting to discuss particulars, I hurried to the hotel to collect my tackle. A stiff split-bamboo bait rod, a large reel with a coarse line, and a trolling outfit were quickly gathered, and slipping into an old suit of clothes, I hurried back to the wharf. The "kids" were already there. The fish shipper introduced me, and the arrangements were quickly made.

The senior member of this novel firm, Lucius Thomas, was an undersized boy of fifteen years, with all the characteristics of the Florida Cracker. He had the sallow complexion, with a generous supply of freckles, the slow manner of speech, and the soft musical drawl which no Northerner can imitate or acquire. His face was an old face, and his manners were always serious and respectful. His education had consisted of two terms at school, but at the tiller he had acquired a knowledge second to none of the many excellent boatmen on the Indian River.

It would be difficult to find another character so opposite to Lucius Thomas as "Dick" Wilder, the junior member in the partnership. The boy was only twelve years of age, but he was larger and better developed than his companion. His features were regular, and, while constant exposure had given his face that peculiar yellow-tinted tan created by a semi-tropic sun, it had not concealed the ruddy look of perfect health. It took but a glance to see that he was a young animal who feared nothing and respected nobody. The element of dare-devilry pervaded every

stitch of clothing on his body. He wore a little fore-and-aft corduroy cap, that was never fore and aft on his head, and a ragged blue sweater enveloped him from chin to waist. The oddest feature of his wearing apparel, however, was two pairs of knickerbockers. The inside pair, kept attached to a single suspender worn outside of the blue sweater, were black. The outer pair were a mixed gray cloth, and, as they were kept in place only by the tension of the waistband, and did not connect at top with the inside pair by at least two inches, the effect was certainly striking.

The *Gator*, the craft loaned to the boys by the fish shipper, was a sixteen-foot flat-bottom Indian River skip-jack. It was rigged with a sprit mainsail and jib, was decked over forward, had a low combing along the rails, but was uncovered at the stern. On each side of the center-board chest was a wooden floor grating, to drain the water from the gill-nets, and in the stern was a low platform, which Thomas called "the pulpit," and which enabled the occupants to keep their feet out of the bilgewater.

The boat was certainly a cheap affair, and could have been bought, on the day it was first placed in the water, for thirty dollars; but it answered the purpose for which it was created. Hundreds of men up and down the Indian River, in Biscayne Bay, and on the Gulf Coast of Florida make a living with the aid of just such insignificant boats and a few "bolts" of gill-netting.

Getting under way was attended with but little labor. The mainsail, which had been wrapped around the mast the night before with the sheet line, was shaken out, the long hard pine pole which answered the purpose of sprit was hoisted into place with the butt in the rope loop at the foot of the mast; and the small end at the peak of the sail; the windward jib-sheet was drawn tight, and the *Gator* began to move slowly up the lake before a light, puffy south wind.

The single seat in the boat, about midships, had been deferentially turned over to the non-participating partner. So, taking off my coat, and rolling it together for an elbow-cushion, I loaded a brier pipe, and made myself as comfortable as possible for the long, slow journey to the inlet, where we expected to meet the blues.

As the *Gator* dragged its heavy bulk through the bright blue Gulf Stream water,

little bunches of bluebills would paddle out of the direct course of the boat and calmly watch us out of the corners of their eyes, as though fully aware that the fish diet of the past three months had made them absolutely unfit for the table.

A big blue heron was stalking along the submerged flats in search of a late breakfast of young mullet. An awkward brown pelican was packing his chin-sack with a day's supply of fish and frogs, and after several ungainly flops finally straightened away for some quiet spot on the other side of the lake. A pair of Florida "duskies," the counterpart of the northern black duck, which were feeding in a little cove, picked up their drumsticks as the boat approached, and with a frightened squawk flew out of sight around an island of saw-grass. As long as they could be seen they were followed by the envious gaze of the senior member, who mournfully remarked, "Them's mallards. They're worth a dollar a piece up to the hotel."

Just before we reached the channel leading into the lake from the ocean, a large flock of sandpipers, hurtling around a point of sand, almost dashed into the sail, but dodged quickly away, and went turning and twisting along the beach like the whirling lash of a long whip.

The absence of wind did not worry the boys at all. They knew that there would soon be a breeze, and herein lies one of the great advantages of yachting on Lake Worth and the Indian River. Except in the early morning and evening, there is always wind enough to stretch the sail; it is seldom too strong for comfort, and never squally.

My companions had provided themselves with two balls of heavy cotton cord, a generous supply of white rags, and some large hooks. A piece of cotton rag securely tied to the shank of a hook was all the bait required, for when the bluefish are on the feed they bite at anything and everything they see moving through the water.

The junior member caught the first blue. He had fastened his line to an oarlock, and tied in it, about two feet from the end, a little knot, the loosening of which was to inform him that some fool fish had been cajoled into believing that the whirling bit of rag was swallowable. I am firmly convinced that the bluefish never considers its food from a digestible point of view. Wilder's

fish hooked itself, and the little knot went out with a snap that brought the boy to his feet. His "Cracker" listlessness disappeared with the rapidity that characterizes the lightning-change artist, and with feet wide apart and body bent low to steady himself, he began hauling in the fifty feet of line, on the further end of which a sturdy blue was sawing to right and left in its frantic efforts to tear away from the hook.

I had purchased my trolling outfit at Palm Beach, and had taken the advice of the dealer in selecting a line which looked thick enough to tow a canal-boat. To the line I attached a metal squid fully five inches long, including the hook. The advice of the fishing-tackle man was good, both as regards the line and the squid. The amount of callous-raising labor performed by my hands in recent years had been somewhat limited, and a smaller line would have made the task of hauling a four-pound fish into a moving boat anything but a pleasure. Even as it was, my palms became exceedingly tender before the day was over, and the last half dozen fish were not landed with the reckless dash which had characterized my morning's work. The long squid was a convenience, for it enabled me to unhook my fish without being bitten. When the bluefish of the South Atlantic comes in over the rail, its jaws are snapping with the viciousness of a wildcat and the rapidity of a buzz-planer, and woe betide the digit that comes between them!

In the parlance of *fistiana*, the bluefish would be styled a "hurricane fighter." He shoots out of the water, and almost seems to stand poised in air, while the rattle of the spoon on his scaly head can be distinctly heard. There is no attempt to gain slack line, no dashing under the boat. The blue puts his dependence upon muscular energy alone, and unless well hooked, he wins. He is game to the end, and with his last throb of life endeavors to clamp his jaws upon some portion of his captor's anatomy.

The very viciousness of the "tiger of the seas" adds zest to his taking. You feel that you are pitted against a fish that expects no quarter. Over the rail he comes, and as he strikes the bottom of the boat, you shorten the line in your hand, and, watching your opportunity, place the hollow of your foot upon his neck. Then, grasping the squid, you take out the hook,

and allow your prize to thrash out its life.

As the junior member drew the first catch of the day into the boat, I was given an opportunity to learn the "why" of his two pairs of knickerbockers. He never allowed the fish to touch the bottom of the boat, but held it high, by about two feet of line, until the first fierce struggles were over. Then, sitting down upon the lee rail, he swung the fish between his thighs, which closed upon it, and the snapping blue was as helpless as though locked in a vise. The hook was then easily and safely removed.

As soon as we sailed into the channel, made by the influx of the tide from the inlet, the blues began to bite fierce and fast. They were running in schools, and more than once the three of us were hauling in fish at the same time, the skipper straddling the tiller in his endeavors to keep the *Gator* from gybing, and, at the same time, gather in his catch.

Once the boat ran through a school of Spanish mackerel; but only one of several that struck was securely hooked, and that came to me. There are few handsomer fish in either fresh or salt water than the Spanish mackerel. The long, flat body, with its wide, flaring tail, is the very personification of finny grace and speed. The coloring, too, is fairly brilliant—steel-blue on the back, shading to white underneath, and golden spots along the sides.

In the early afternoon the *Gator* was anchored in the inlet, where I rigged my rod, and, with some pieces of conch for bait, had a good bit of sport, catching a half dozen redbreasts and as many small sheepshead. "Bottom fish," however, were worth only one and one-half cents a pound, and as soon as the tide turned, the firm insisted that the *Gator* be headed into the channel after more blues. The fish didn't bite so well as they did in the morning, but the catch was increased considerably, nevertheless.

About four o'clock, a start was made for home. The wind had already begun to die away, and the last two miles into West Palm Beach were made with the aid of a "hard pine breeze." When we had tied up at the fish-house, I picked out two of the largest blues and the Spanish mackerel, for evidence, and the boys weighed in the balance of the catch. The fish shipper's scales said one hundred and ninety-two pounds, and I am confident that if the figures lied, it was not to his disadvantage.

AUTOMOBILE DEVELOPMENT

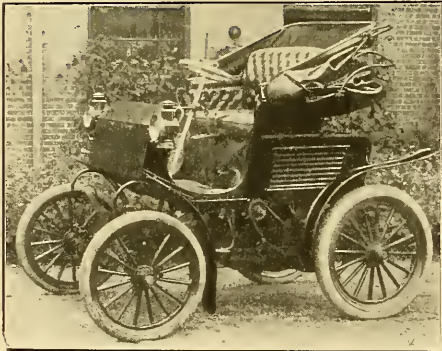
By M. C. Krarup

THREE "cycles of Cathay" have been concentrated in the few years which separate the opening of the twentieth century from the first practical application of the electric storage battery and the first mounting of a gasoline engine on a mechanical vehicle.

Automobilism rests squarely on these and the steam-engine; the three physical pillars of modern civilization. It would be impossible except on this foundation. It stands as the most important attack upon our

ing into a brief notoriety, only to vanish by reason of their inherent defects.

With perhaps 50,000 mechanical vehicles in use all over the world, it seems preposterous even to think of the possibility that further experience might condemn them to disuse. They are regularly used for carrying mail and provisions to military forts through a wild, roadless country in French Soudan; they have proved of high value in solving the transportation problems in the war against the Boer republics; they form a



THE ROBINSON HEAVY GASOLINE
MOTOR CARRIAGE.



"PEERLESS VOITURETTE," CONVERTIBLE
FRONT SEAT. GASOLINE MOTOR.

wonted mode of living, which, without yet being brought to a successful close, seems destined to succeed completely because it involves no really new problems, but only painstaking application of knowledge which the world has already made its own. There is hardly room for the assumption that automobilism may be a huge fallacy, and that the thousands of motor vehicles now existing may disappear as completely under the horizon of a few years hence as did the steam road-wagons, which, since 1784, have appeared and reappeared on the scene at intervals of about thirty years; in each instance spring-

much-illustrated feature in French and German army maneuvers; physicians are employing them for professional calls, and in all the centers of civilization they are being more and more widely used for pleasure-driving, and for short hauls of freight, for trucking and merchandise delivery.

Nevertheless the question is asked: Are they being used on their merits, or for the sake of a theory in their favor, or perhaps for advertising, or in order to satisfy personal vanity?

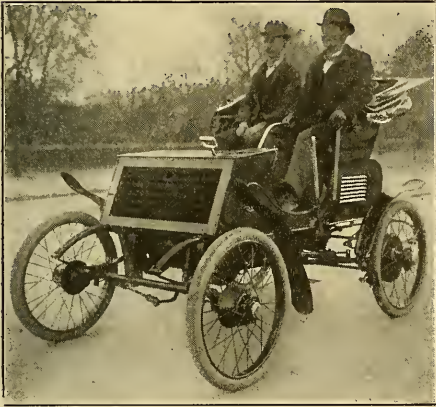
It has been alleged that in a society where financial disparity did not exist, automobile pleasure-carriages could not be sold; that

they are made and used only because there are persons to whom cost is a subordinate question. And it is reasoned that, this being the case, the present use of automobile pleasure-carriages decides nothing as to their real merits compared with older methods, and furnishes no decisive argument for their continued use, which must eventually be determined on the point of merit alone.

Perhaps, it is also said, the automobile movement, with its hopes and its disappointments, will prove such a filip to the energy of horse-breeders, that soon the horse and its animal mechanism will become the subject of close and intelligent study, on entirely new lines, with the result of largely increasing its usefulness and decreasing the cost of its keep, even as we know that many half-

ducing them in earnest, for all classes of work, be overcome? considering that no automobile will show its full value before a large portion of the road system has been improved.

Nobody undertakes to answer these questions, or other expressions of doubt in regard to the future of the automobile. They must be answered by facts accomplished. It is realized by those best informed that a good deal of faith is required to be a stanch automobilist, and while many are strong believers on the basis of very poor reasoning, there seems to be no shorter road to the true faith than through a thorough study of automobiles in their practical workings, following upon a very complete technological education.



THE HYDRO-CAR.

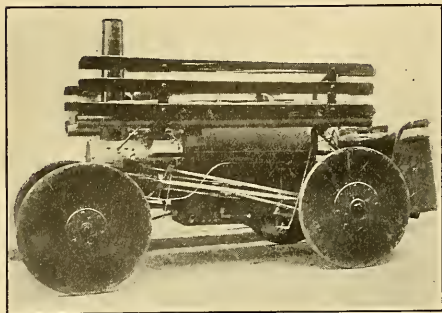


THE ST. LOUIS "OVERLAND"
GASOLINE CARRIAGE.

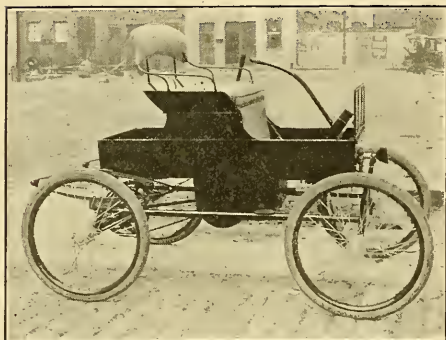
civilized tribes get much more and better work out of their horses than we do.

The warmest friends of automobilism themselves feed the pessimism of the doubters when they point to the great benefit which will be derived from automobilism through the road improvements that must go hand in hand with it. At the rate of \$4,000 per mile only a small percentage of the road mileage in the United States could be radically improved for one thousand millions of dollars; and if road improvement on this extensive scale is really required to assure the successful operation of another one thousand million dollars' worth of automobiles, how shall the initial difficulty of intro-

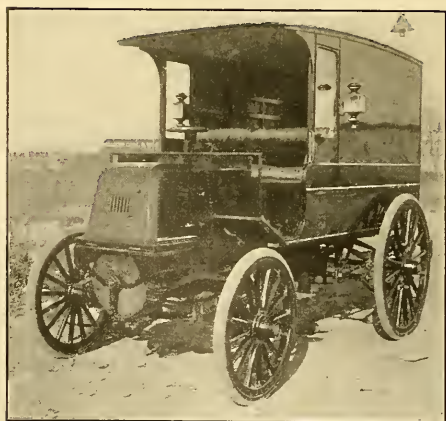
It is in this respect rather characteristic that the greatest enthusiasm for automobilism is found among those who prefer the explosion motor vehicle, which at present is much cruder in the quality of its performance than either the electric or the steam vehicle; and it is also notable that some of the best explosion motor vehicles are designed by electrical engineers, some of the best steam vehicles by photographers, and some of the best electric carriages by bicycle manufacturers. Automobile progress depends to such an extent on all of the principal discoveries of the past century, that it is hard to find men in the orthodox M. E. profession who are masters in all the questions



RICHARD DUDGEON'S STEAM CHAR-A-BANC,
MADE 1860.



THE BAKER ELECTRIC RUNABOUT.
WEIGHT ABOUT 500 LBS.



THE DAIMLER HEAVY DELIVERY
WAGON (GASOLINE).

involved in automobile construction. Automobilmism draws its designers from many vocations. They fumble and grope in the beginning, but learn as they proceed; and when the results accomplished by all of them are exhibited, as they were recently on two successive occasions in New York, the public at large is induced to believe that it may form an approximate idea of the automobile development that has been reached; but, unfortunately, an indoor "show" fails to reveal much that is of the highest interest for judging of the real fitness of the various carriages, under working conditions; and again the public must fall back on what faith they can muster, and such evidence of faith on the part of manufacturers as one may be disposed to find in a gorgeous display, elaborate workmanship, and expensive finish.

A really competent opinion can only be formed by those who are, or might be, automobile engineers themselves, and this qualification can at present only by courtesy be admitted as properly belonging to any one person; automobile engineering not being a small, special branch of mechanical engineering, but, on the contrary, one that comprises all the requirements of all branches of engineering, in their most exacting form; with the additional requirement of experience in the art of carriage building and familiarity with all the changing conditions under which vehicles must be used. Practically, automobile engineers do not exist, but the best automobile results are obtained by co-operation between persons qualified, each in one of the branches of knowledge entering into the construction.

This is the situation especially for the gasoline motor vehicle, less so for the steam vehicle, and in a still smaller degree for the electric carriage. The three types are therefore reaching toward perfection in the reverse of the order named; but on the other hand, the electric vehicle and the steam phaeton or surrey have limitations that seem unavoidable, while the explosion motor vehicle, once perfected, seems to be adaptable to all kinds of work for which horses and wagons have heretofore been employed.

The electric and steam carriages as known at present are to all intents and purposes new commodities, highly useful in their way, but their value is to be judged from a personal standpoint in each case without any reference to what previously has been done by

horses. They are adapted for certain kinds of work in the hands of certain classes of people, and, to paraphrase Lincoln's well-known remark, "if the kind of service they are adapted for is the kind of service a person wants, then such a person is just the kind of person who should buy that kind of a vehicle." The gasoline motor vehicle is more like an unbroken horse; it will not do any work quite satisfactorily, but nothing that we are accustomed to look upon as vehicular work is beyond its scope and possibilities.

As the limitations of the steam carriage are very largely conditioned by the high degree of skill, care, and watchfulness which they exact, and the great bulk of the boilers and tanks; it seems to the writer that the future of the steam system for automobiles would be brighter, and its field larger, if more ingenuity were expended on devising a suitable form of steam horse entirely dissociated from the carriage proper, so as to leave the latter free from the encumbrance of machinery, and frankly acknowledge the motor portion as the delicate engine which it is, wherever it is placed. But nothing has been done in this respect, and nothing will probably be done, unless the need arises for steam vehicles to be used for other than purely pleasure purposes.

What is the present status of automobilism? The question cannot be decided on technical grounds, because nobody's competency to give the decision is admitted. Each constructor is entitled to his opinion. The public can have none, except as it may judge from what the various vehicles prove themselves in practice. The exhibitions give only clues in this respect, but leave a multitude of questions unanswered. They show styles, and workmanship, but fitness only in the meagerest fashion. Still, a few data are beyond controversy, mainly the favorable ones.

Electric carriages of the larger sizes are practically where they were a year ago. The latest development tends toward diminutive electric piano-box runabouts, so small and light that two storage cells, weighing less than two hundred pounds, will propel them as far as three-thousand-pound batteries will propel a five-thousand-pound electric cab. These light electric vehicles are not subject to those troubles with the air tires that form one of the most formidable items of expense in the maintenance of the full-sized electric carriages.



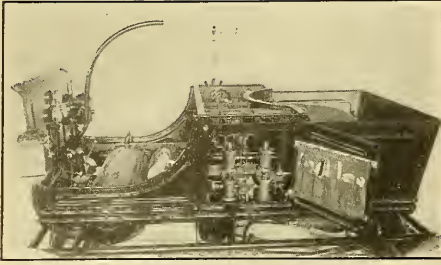
THE WALTHAM "VICTORIETTE."



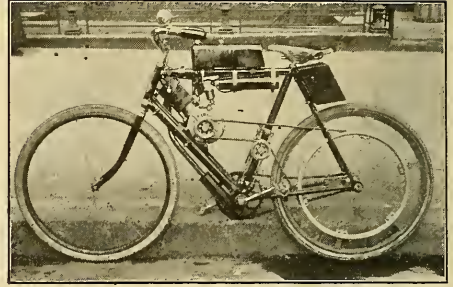
THE "KNOX" SINGLE CYLINDER,
5-HORSE-POWER MOTOR—AIR COOLED.



THE "CANDA" GASOLINE VOITURETTE.



ENGINE AND CONTROLLING APPARATUS
OF "VICTOR" STEAM RUNABOUT.

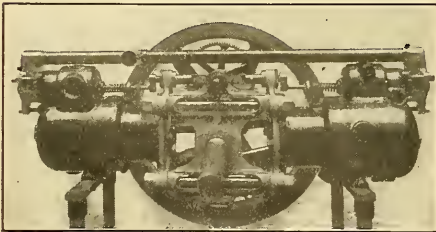


THE "AUTO-BI,"
RECENT TYPE OF MOTOR BICYCLE.

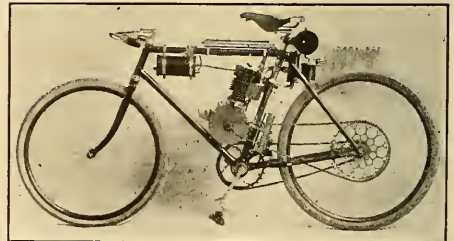
Two of the largest producers of electric carriages, the American Bicycle Company and the Electric Vehicle Company, have this year supplemented their stock with gasoline vehicles of very substantial design, and containing original features in construction. These are both illustrated herewith, and it is perhaps worthy of special notice that the Electric Vehicle Company's gasoline carriage supports the engine, and driving mechanism, entirely on the running gear, leaving the carriage box free for other purposes. The spark shifter is automatically regulated according to the engine speed, by means of a governor, a provision which removes one of the features in the management of gasoline vehicles which troubles beginners most.

It is one of the most decided advancements of the year, that speed regulation, by throttling of the explosive mixture, has been perfected—as in this carriage and several others—so that now all voluntary speed changes of the vehicle may be effected as easily as with a steam-engine, while the variable gears need only be used when the speed of the engine is insufficient to produce the

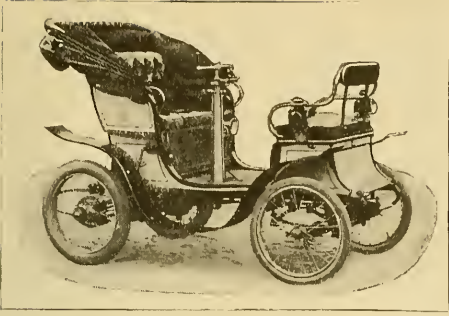
desired speed of the vehicle, or the power insufficient to overcome the resistance from road and wind with the normal gear. Indirectly the throttling system, which is more specially American than any other feature of the gasoline-engine vehicles, contributes to reduction of noise, reduction of the amount of cooling water to be carried, and reduction of the disagreeable shaking of the carriage—three shortcomings which have militated strongly against gasoline vehicles in the past. The value of the throttling system depends principally on the fact that, for nine tenths of the work of a vehicle, the full-sized explosion that may be produced in the cylinders develops much more power than can be utilized, and much more heat, and vibration, than desirable. The most original and effective throttling system is perhaps exemplified in a radically new motor, which at the Madison Square Garden show was exhibited in a little three-wheeled vehicle. Although capable of as high as five-horse-power, the single cylinder motor of this little carriage worked with perfect regularity at a power development not



DOUBLE CYLINDER GASOLINE ENGINE
OF THE "AUTOCAR."



MARSH MOTOR CYCLE.



DE DION "MOTORETTE,"
NEW YORK TYPE.



THE "GASMOBILE."

exceeding three fourths of one-horse-power, and seemed better adapted for light work than any of the other air-cooled motors, mostly of French design, usually employed in motor cycles and very light carriages, in which the power application is regulated chiefly by the spark shifter. In the new American motor referred to, the compression of the explosive charge is variable, but its composition constant, and the spark, while not automatically regulated, except for starting the motor, is fired in the middle of the combustion chamber, in order to reduce the time for flame propagation, but is not retarded or advanced according to the engine speed.

In variable-gear-devices no radical improvements are recorded, and sparkers and vaporizers still leave much to be desired in the majority of vehicles.

The prominence of the water coils, in which the cooling water is exposed to radiation of heat, constitutes one of the esthetic drawbacks to the larger sizes of gasoline vehicles, from which no relief is in sight, but otherwise, it seems to be generally admitted that there is freer scope for artistic, and striking design in this type than in either steam or electric vehicles. It would probably be more correct to say that the necessity for new design in the gasoline vehicle is more pronounced, and that the necessity has caused the radical departures from ordinary carriage lines by which the gasoline vehicle distinguishes itself, sometimes offensively, but oftener in a manner pleasing to the eye and grateful to the natural demand for new contours in new things. Among the illustrations will be noticed one representing a carriage made by the Auto-



THE "CENTURY" ELECTRIC VEHICLE
ASCENDING STEEP BRIDGE APPROACH
(SYRACUSE, N. Y.).



ROADS OVER WHICH THE REMINGTON
AUTOMOBILES ARE TESTED.

mobile Company of America, in which this happy boldness of design is well merged in a harmonious *ensemble*.

In the massive Daimler freight wagon is shown one of the first American applications of the explosion motor system to heavy work, but the pattern is almost if not quite identical with Daimler wagons built in Europe for the same class of work.

A number of heavy gasoline touring carriages have been developed, of which the Robinson carriage is a good example. They represent a school of automobile engineering which studiously avoids everything flimsy and untried, in favor of the safety against breakage that may be obtained by the use of heavy material and painstaking workmanship, and it seems to be well established that these heavy carriages can actually travel over bad roads at high speed; but those who look to automobilism for all-round usefulness, find it difficult to discover the germ of further progress in a system of construction by which two to three thousand pounds of material are required for the transportation of two or four persons. Still the ratio of weight to pay-load is said to be smaller than that between the weight of a Pullman sleeping-coach and its full complement of passengers.

In steam-vehicle construction there is a similar divergence of opinions in the matter of weight. The extremely light steam phaetons of a year ago have practically been discarded. Even those manufacturers who prefer light construction have increased the weight from five hundred to seven hundred and fifty pounds, and the opposite faction, which is more numerous, produces carriages which average about fifteen hundred pounds. The addition of material is partly in the carriage portion, but also largely in the boiler and engine. Boilers and water-tanks are made larger than formerly, and in racing vehicles attain a special size with a view to sustaining high speed for a long time. Engine construction, with all its minor variations, is kept well within the experience of time-honored steam-engine practice, and nothing radically new has cropped out. In fact, there is a marked reaction from the

preference for automatic regulation of the operative functions of the engine, which was incorporated in the first successful American steam automobiles. Most builders now lean to the opinion that automatic devices lull the operator's watchfulness unduly, and become a source of danger to the integrity of the engine through failure to operate reliably. By dispensing with the automatic devices, they simplify the mechanism, and throw the burden of correct operation upon the skill and care of the driver. Several builders go so far as to warn prospective customers from purchasing, unless they are willing to take upon themselves all the responsibilities of a locomotive engineer. A notable exception, in this respect, is the Overman Automobile Company, which makes the Victor steam carriages. In this vehicle the principle of automatic regulation is carried out consistently; to such a point of completeness that an entirely unskilled person may operate it after a few minutes of instruction; but the automatic devices are supplemented by others, that permit the operator to throw them out of action, and regulate the functions of the engine by hand. The carriage body is entirely of metal, and the steam exhaust is made invisible by fine comminution through sixty small apertures in the exhaust tubes.

In all of the steam pleasure-carriages, so far produced, the entire carriage body is filled with machinery, and no space is available for baggage; but a makeshift arrangement is made in some instances, permitting a trunk to be strapped to a shelf bracketed behind the seat. Lately, steam delivery-wagons have been placed in the market, in which the carrying space is obtained by means of an inclosed superstructure over the rear portion, and the chimney is boxed in and extended through the ceiling of this superstructure. Many different patterns of chimney hoods have been tried during the past year, with a view to preventing the wind from blowing into the gasoline burner and interfering with the regularity of the flame and the steam generation. Most troubles in this respect are said to have been overcome.

FOX HUNTING, ANCIENT AND MODERN, IN VIRGINIA

By Margaret Neilson Barry



UCH has been told about hunting in old England, and of late the periodicals have contained many photographs purporting to describe the

sport in various clubs near New York; but little has been said of this pastime in the South, where, from Colonial days, men have hunted the wild fox in his native haunts, and grown from boyhood to man's estate in the saddle.

In more primitive times, when Reynard was less harried by the encroachments of civilization, and barb wire—that pest of the hunting field—had not been invented, it was no unusual thing for a party of horsemen to spend several days in a rollicking hunt, sleeping often where night overtook them, with their weary but stout hunters tied to the nearest fence, and given an evening meal from unshucked corn in an adjacent field. But those jovial times, with their hard-riding, hard-drinking sportsmen, are a thing of the past, and drag-hunting has, in a great measure, replaced the old “fox chase.”

Virginia was settled by the English, in whom, more than any other nation, the love of hunting is inherent; and it is from these sporting ancestors (for there has been little immigration) that the Virginian inherited his love of the chase.

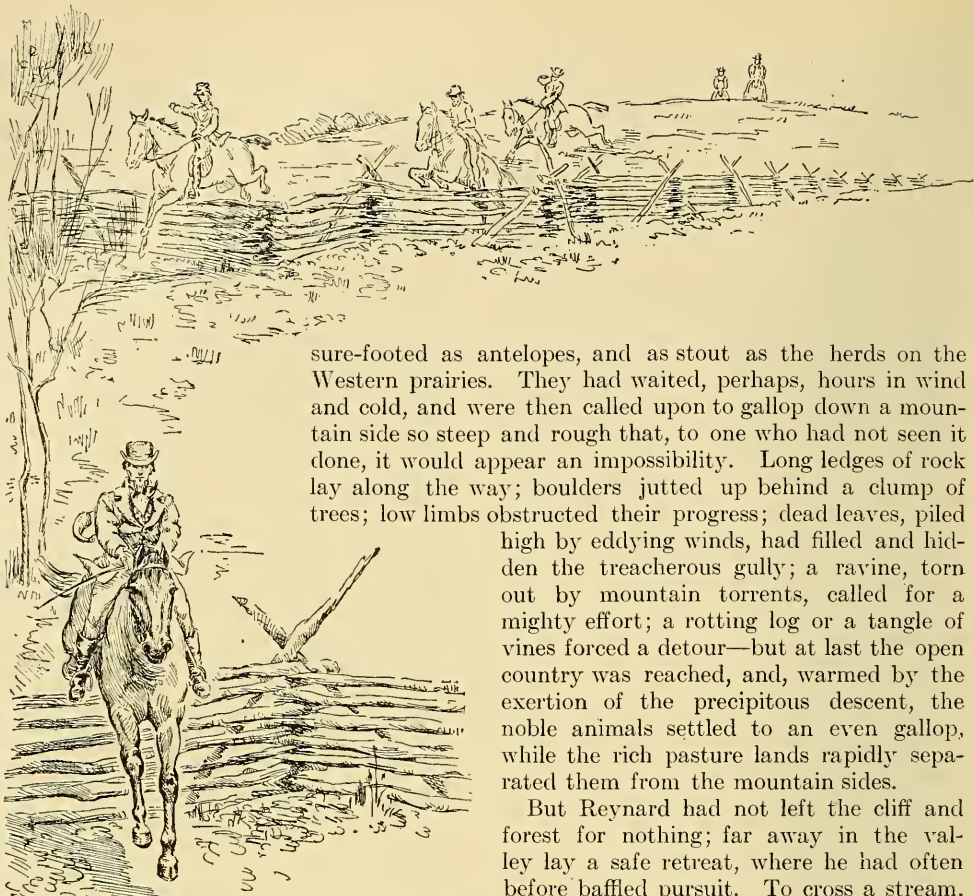
In the days when Washington lived at Mount Vernon, and that stately mansion was filled with a genial company, fox hunting flourished, and daily the great man visited his kennels and his stables. But it was, perhaps, just before the Civil War that the sport was in its prime, for the large landholders had unbounded leisure. Every gentleman then kept his pack, just as he owned slaves and horses, and, with his sons and friends, spent most of his time in pursuit of the wily little gentleman in red.

The great event of the year then was Christmas, which, it must be understood, comprised those days from the eve of the twenty-fifth to New Year's night, during which time no work, except that absolutely necessary, was exacted. And as the slaves were enjoying the holiday, so did their masters.

A number of guests, each bringing hounds and body-servant, would assemble under one hospitable roof, and after a night of dancing and revelry, there would follow a day of sport and excitement.

The large and varied pack would draw the nearest covert, with varying success. Should a fox be started in the open, a good run would be had, with finally a kill, or, if clever and lucky, he might escape into the mountains. Here on some clearing, where the wind cut like a knife, or in a thicket of frosty pines, the party would wait, exchanging reminiscences and flasks, or larking for a bit over gullies or fallen trees, while an energetic few hallooed, and called encouragement to the hounds. Some would dismount to rest their horses, and if the wind were particularly biting or the cold great, a fire might be started, while the nags were given the best shelter to be had, behind ledges of rock or vine-hung thickets.

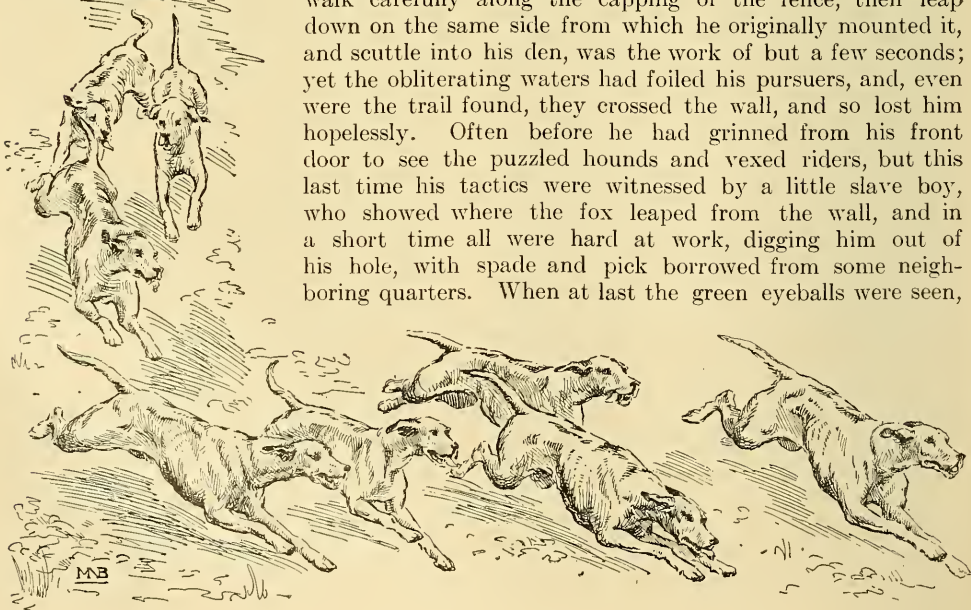
Suddenly a long-drawn note would send a thrill of expectancy to every heart. There would be exclamations of “That's Rose—it means a fox!” “Wait till Ranger joins in; if it is a fox he'll know it.” “There goes Bill! No, that is Sweetlips!” as a full, steady note rose on the crisp air; and in a few seconds fifty hounds had mingled their voices, and the pack was away in full cry, the woods echoing with that most thrilling of all music. In another minute the sportsmen had mounted, and a scene followed which would have made the heart of the straightest rider in a grass country leap into his mouth. For those Virginia horses, in whose veins coursed the hot blood of generations of thoroughbred ancestors, were as



sure-footed as antelopes, and as stout as the herds on the Western prairies. They had waited, perhaps, hours in wind and cold, and were then called upon to gallop down a mountain side so steep and rough that, to one who had not seen it done, it would appear an impossibility. Long ledges of rock lay along the way; boulders jugged up behind a clump of trees; low limbs obstructed their progress; dead leaves, piled high by eddying winds, had filled and hidden the treacherous gully; a ravine, torn out by mountain torrents, called for a mighty effort; a rotting log or a tangle of vines forced a detour—but at last the open country was reached, and, warmed by the exertion of the precipitous descent, the noble animals settled to an even gallop, while the rich pasture lands rapidly separated them from the mountain sides.

But Reynard had not left the cliff and forest for nothing; far away in the valley lay a safe retreat, where he had often before baffled pursuit. To cross a stream,

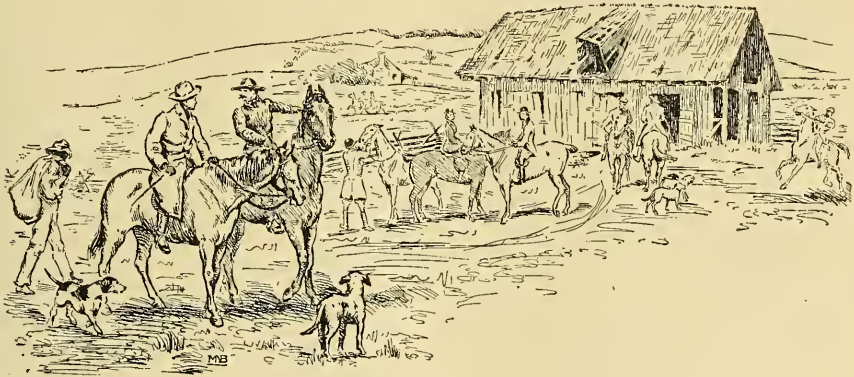
swimming against the current; make a short dash for a wall, running about fifty yards beyond it, and double on his trail; walk carefully along the capping of the fence, then leap down on the same side from which he originally mounted it, and scuttle into his den, was the work of but a few seconds; yet the obliterating waters had foiled his pursuers, and, even were the trail found, they crossed the wall, and so lost him hopelessly. Often before he had grinned from his front door to see the puzzled hounds and vexed riders, but this last time his tactics were witnessed by a little slave boy, who showed where the fox leaped from the wall, and in a short time all were hard at work, digging him out of his hole, with spade and pick borrowed from some neighboring quarters. When at last the green eyeballs were seen,



like baletui lights, a rude instrument was thrust into the den. This was made from a limb of a near-by sapling, cut about eighteen inches in length and less than one in diameter, through the split end of which was drawn, and securely tied about a groove in the stick, a loop of braided horsehair, pulled from some of the hunters' tails—for they were not then docked. When Reynard snapped at it a quick twist was given, and his jaws were firmly secured. It was then comparatively easy to drag him out and thrust him into the ready bag.

Reynard was then taken to a convenient spot and given a fair start, but at the end of an hour saw his enemies again upon him, while a score of hunters

pony. In a circle about the fire the guests were ranged, and in a wider circle lay the hounds, for their humane master always allowed them, after a hard day's work, to share his light and warmth when they had devoured and fought over their evening meal. Occasionally two again became quarrelsome, and were promptly evicted, but soon managed to slip into the genial warmth of the great room, and their brown eyes watched the master's guests as they spun yarns and drank far into the night. All were, however, up again before dawn, to find a skim of ice on the wooden buckets by the mahogany washstand, and a busy scene ensued: darkies running hither and thither, bringing horses, tightening girths, shouting directions and



"THE MEET IS AT AN OLD BARN."

were pounding through the orchard behind. With his remaining breath he sprang on a wall and snapped defiance at the foremost of the cruel pack. When they recoiled an instant he made a desperate spring for liberty—his last.

Before a blazing fire that night, over a swimming bowl of apple toddy, an elated sportsman showed the hard-won brush, which was all that remained of the game little fellow.

It was an English settler who entertained them in his hospitable home in the long winter evenings with accounts of runs in the mother country. In the mellow light thrown by home-made candles and blazing logs, he sat in a quaint armchair, upholstered in horse hide tanned with the hair on, while four little steel-shod hoofs formed the feet. It is a monument that still exists to a well-loved gallant

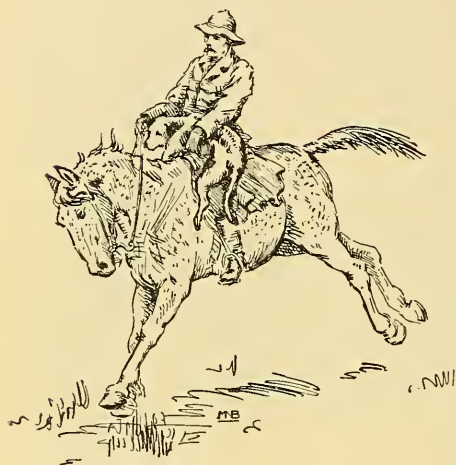
getting in each other's way—for it always took two or three slaves to do what we now consider one man's work, and it took twice as long to do it. The winding of horns as the sun rose brought new faces to the meet, and told that another day worth living had begun.

The noblest hunter of those halcyon days has returned to the dust, but his son's sons have begotten a mighty breed, famed for bone and muscle—intelligent, kindly, stout-hearted. The great places are divided into small farms, a new class has arisen, but the same love of horses and hounds prevails; the poorest man owns a good steed; the most uncouth country boy rides like a centaur.

There are still sections of Virginia where fox hunting is conducted much as it was before the war, though in a modified form; where most of those following are gentle-

men, well dressed and well mounted, and where, except for the height of the timber, and the absence of hedges, one might almost imagine oneself in England.

In general, fox hunting is now indulged in on a different scale. There are no club houses, no subscription packs, no rules or regular appointments. Farmers who love the sport keep a few hounds, and on fine scented mornings ride alone into the woods, and are perhaps rewarded by a fine, though



"THE OWNER CARRIES HIS TREASURE
TUCKED UNDER HIS LEFT ARM."

solitary, "race." Or, as the day advances, other lovers of the chase, hearing hounds and horns, join in until there is a goodly field. "Field," by the way, so applied, has no significance for them, nor do they know the meaning of "drawing a cover"; and "gone away" would bring no thrill to their bosoms. They "put the dawgs in" a likely place, where they either "jump" the fox, or "strike his trail," or he may be "sight-raised." But in spite of the paucity of their hunting vocabulary, these men are real lovers of sport, and there is never a murmur heard at conditions during the longest day spent in the saddle.

Throughout the State, hunting naturally differs. In the sandy, piny sections there is little galloping and less jumping, and here gray foxes chiefly abound; but in the hilly sections (that part known as Piedmont) there are game little red-jacketed gentlemen, who give the stoutest hound

and the longest-winded thoroughbred as much work as they desire, not to mention the rider.

Here in the early autumn, as soon as corn is cut (for farmers must be considered) and frost has killed the long weeds which rendered galloping or jumping dangerous, hunting begins, and is continued on all promising days till spring. Sometimes a bagged fox is dropped, and this brings out a larger field, for word has been circulated that "Jim is goin' to turn a fox loose." The meet is at an old barn in an advanced stage of dilapidation. The time appointed shows no one at the meet (for the Virginian never hurries), but during the next hour, by ones and twos they ride up, some with lean hounds at heel, and among them "Jim," with a darky boy following, bearing the fox in a bag slung over his shoulder.

Those who make up the field are a motley throng, unique and humorous: several may be members of the adjacent Drag Hunt, one or two of them women in habits of the latest importation, and mounted on finished hunters; two or three farmers, owners of large and rich estates, but scornful of the dress of their up-to-date fellows—a long overcoat or sweater they consider, and rightly, more comfortable on chilly mornings than the best cut pink coat; a cross-roads storekeeper on a big-boned chestnut that rears dreadfully but can gallop all day; a thick-bearded man, father of a large family, who runs a small farm on shares, astride a long-legged, long-backed mare that doesn't look as if she could jump, but can show her heels to the best over stiff timber; and a middle-aged cattle dealer, whose pot-bellied, flea-bitten gray is his proudest possession. He tells gleefully that the animal has been plowing till to-day, and that this morning is the first time since spring that it has tasted grain. One hound, a rail-like puppy, follows at his heels; but when hounds are running, the owner carries his treasure tucked under his left arm—most of these men ride with the reins in their right hands—where he dangles placidly, being only a little shaken at the fences.

Should Reynard succeed in eluding his pursuers, Puppy (for he has no name, and retains this cognomen till gray with age, unless some younger canine be brought to share his scanty meal, when he becomes "the old dawg") is again deposited on the

ground. This is done that he may learn to hunt; but risk that young life from trampling hoofs in a burst across country? Never! These men love their horses, and mighty are the boasts of their powers—but a hound is their especial delight.

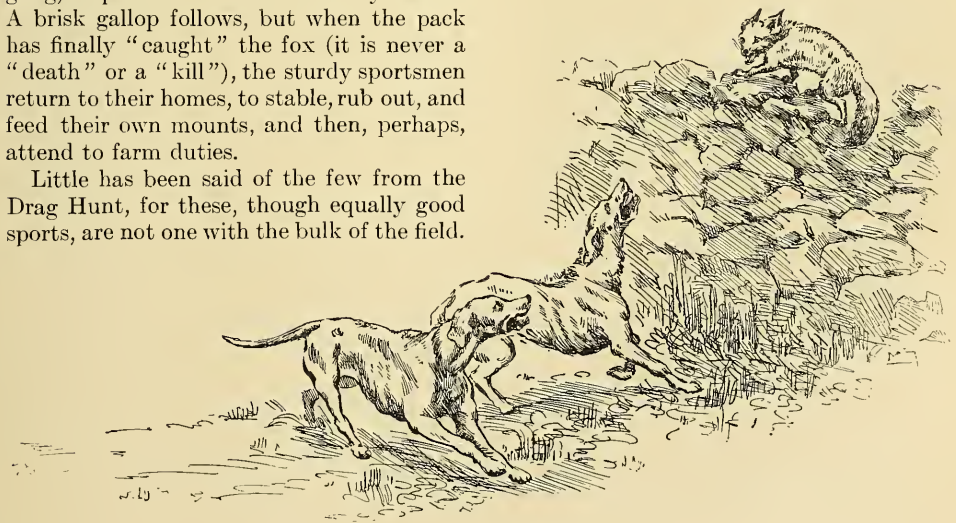
At the first fence there is a mad rush; no settling to a hunting pace, no steady-ing by means of a delicately adjusted bit, no riding a separate line. Helter-skelter they come, one horse's nose at another's flank; and though some plow through the wall, not one wavers in his stride. But the gray, perhaps because of the pull on the severe army bit, stops, and rider and saddle continue the pace; then, ashamed of his timidity, he follows his master's lead, bucking over the four-foot wall, and greatly thereby endangering that worthy sportsman's life, but filling his heart with pride.

Most amusing is the scene where a fox has been run to ground, dug out and liberated in an open field. A number of darkies who have followed on foot and seen a good deal of the sport, by taking short cuts in the direction Reynard is liable to take, help to hold the hounds; but each sportsman dismounts, and with his reins over one arm and a tugging hound or two in charge, watches the temporary master ride forward, perhaps two hundred yards, and set the captive free. There are many yelps and much struggling as the little fellow darts off, also a great deal of good-natured raillery among the line of men before the struggling, impatient hounds are finally loosed. A brisk gallop follows, but when the pack has finally "caught" the fox (it is never a "death" or a "kill"), the sturdy sportsmen return to their homes, to stable, rub out, and feed their own mounts, and then, perhaps, attend to farm duties.

Little has been said of the few from the Drag Hunt, for these, though equally good sports, are not one with the bulk of the field.

They cannot stand a long wait on an open hillside, on account of their clipped hunters, so must constantly keep moving to avoid chill; but when it comes to galloping, condition tells, and they are among the very few in at the death after an extended run. In negotiating fences, too, they have the advantage, as many of the farmers' horses are trained to jump from a standstill, while the former fly their fences. These, it may be stated, were not, in the old days, what they now are. Then, a horse, in the words of the song, "must not only gallop, but stay"; now, more is required—he must also jump. The fences then were not high or numerous; the quaint snake fence, easily knocked to pieces, and a few stone walls, were all one had to consider, and they were never more than a few feet in height; the fields, too, were larger, and there was more waste land. Now, stake-and-bound fences, post-and-rails, with ridged walls, and occasional plank fences, come in quick succession, and one must be prepared to jump a chained gate, if necessary, or bars in a wire fence; and to do this, a man must have his heart in the right place.

Fox hunting in the olden times was a lordly pastime, and it remains so to this day; in fact, fox hunting at any time is a goodly sport; and our hearts swell in sympathy to the toast given over a bowl of Virginia's famous egg-nog—"Here's to horses, hounds, and hunting!"



UPLAND SHOOTING IN OREGON

By Joseph B. Thompson

IN early days prior to and during the time when the "Oregon Question" was agitating the nation, and the slogan of "Fifty-four forty or fight" came near giving these United States one other opportunity of testing the affection of the mother country for her kinsmen, the term "Oregon Territory" embraced practically all of the vast area lying west of the Two-ocean Pass in the Rocky Mountains to the Pacific



A PAIR OF GRAY GROUSE.

Ocean, and from the California line north as far as the patriotism and imagination of the American pioneers in that region prompted them to claim. It was a vague term, embracing about all of what is now included within the limits of the three States of Oregon, Washington, and Idaho, and until about 1850 was little known save to the explorer and the fur trader.

This region was, and to some extent is still, a hunter's paradise. It was not un-

natural, perhaps, that those intrepid explorers, Lewis and Clarke, owing principally to the fact that their journey was along the Columbia River, and that they did not penetrate into the interior, should have learned little of the variety and quantity of game, and that they should have suffered at times for lack of food, in a land of great abundance. They saw the water fowl, it is true, and had their slumbers disturbed by the noises made by the vast numbers of ducks, geese, and swan, as they camped on the banks of the Columbia on their way to Astoria; and during the winter they spent at Clatsop they had of lean and unseasonable elk, killed around Astoria, more than enough. But of the real game of the country and its value as a food supply, they seemed to have known but little.

John Jacob Astor's later expeditions were in pursuit of furs, in which the country was very rich, it being the natural home of the beaver, mink, and other fur-bearing animals. The traders were little concerned with game in general; and when Alexander Henry, that bravest and most daring of all voyageurs and fur-trading freebooters, and the most fascinating of diarists of the early life of the great Northwest, made his journey across, on much the same lines as Lewis and Clarke had, and assisted the British to haul down the American and plant their own flag on Astor's fort at Astoria, changing its name to Fort George, he, too, was looking for furs; and while he made one trip up the Willamette, above what is now Oregon City, he stopped short of penetrating the great valley through which that river flows.

It remained for later explorers to bring back more detailed and authentic reports of the country, and to give form and substance to the movement, along the Oregon trail, of those hearty pioneers who finally took and retained possession, for the flag, that country which is an empire in itself.

The numerous valleys, and the abundant cover furnished by the forests of Western Oregon, taken in connection with the great

abundance of insect and plant food, even before the days of agriculture, furnished a splendid range for upland birds; and the farmer has, in his grain fields and gardens, added a new and important food supply, as well as improved the upland shooting, by increasing the area of cleared land.

No form of hunting possesses so many of the elements of true enjoyment as upland shooting; combining, as it does, companionship, healthful exercise at a time of year when Nature offers most to her admirers, and the opportunity to test the endurance and skill of the hunter and his dog in pursuit of the best of all game-birds.

Why is it, then, that the protection of the birds furnishing this enjoyment has for generations been the object of almost criminal indifference and neglect? with the result that practically east of the Mississippi there is no upland shooting worthy of the name. Since the days when the Jersey farmers were wont to go out in bands and surround a piece of wood or brush land, and with their flintlocks pour death and destruction into the innocent *bonasa umbellus*, the great aim of many who hunted seems to have been to kill and destroy, forcing one to think, sometimes, that they must consider it a scourge and a menace to health that these birds were allowed at all to exist. Even at

this late day, when people should know better, the pot-hunter, with his cur dog, is allowed to relentlessly pursue the vanishing remnants of this species, in the same old shameless way; and the last of the race of Heath hens that are said to still survive man's cupidity and cruelty on Martha's Vineyard, are threatened with extermination by similar means.

From such thoughts it is pleasant to let the mind wander to a place where, in spite of man's desire to destroy, one can find fairly good sport; where upland shooting is not a thing of the past, and where the people, more wise than their eastern neighbors, are striving to protect these birds from extermination.

There are two varieties of quail in Oregon—the Mountain quail, or plumed partridge (*Oreortyx pictus* of Douglas), and the Valley quail, or California partridge (*Lophortyx Californicus* of Shaw), the range of the former being the mountains of Northern California, Oregon, and Washington, including the Coast Range, and the foothills sometimes extending well into the lowlands; and the range of the Valley quail being the Coast valleys of California and northward; this variety differing somewhat from the Valley quail of Southern California (*Callepepla Californica vallicola*, Ridg.)—the differences



THE MALE RING-NECKED PHEASANT.

Upland Shooting in Oregon

being due, probably, to climatic and other conditions. These birds are, generally speaking, somewhat larger than the Bob White, which is not native, but which has been introduced, with no great success, however.

The Coast varieties are migratory, very strong, extremely active, and in most cases wilder and harder birds to hunt than the eastern favorite. It is unusual to find them where good cover is not plentiful; more frequently, indeed, in Western Oregon, they are found in the woods or in

State. Altogether, the Valley quail is a gamier bird than most other species of the partridge; and the hunter who hopes for success must not think that when he has studied the Bob White carefully, he knows all there is to learn of the quail.

The Passenger pigeon has never, so far as known, ranged on the Pacific Coast. The pigeon of that region is the species known as Band-tailed (*Columba fasciata*), being slightly larger than the Passenger. Early travelers and explorers mention it as existing in the valley of the Columbia in consider-



HOW CLOSE THE GRAY GROUSE LIES TO THE DOGS.

“burns,” where hunting is difficult; and it requires the highest degree of skill and accuracy, as well as a sportsman’s enthusiasm in overcoming obstacles, to attain any satisfactory amount of success.

At times and in some places they are found in considerable quantities in fairly open country, when excellent sport results. They usually go in flocks, but are easily scattered, and will lie well to the dog. A well-trained dog is indispensable in this form of sport. The vicinity of Coffin Rock, on the Columbia, has long been a favorite resort for hunters of this game-bird. The shooting is also good in other sections of the

able quantities, being often seen, during the autumn and early winter, in large flocks along the Cowlitz River; but this bird never existed in any such quantities as the eastern pigeon did. It is also migratory, nesting somewhere in the far North.

Generally speaking, pigeon shooting for a limited period in the autumn is good in the Coast valleys. Wherever acorns are plentiful, these birds may be found. They are shot much in the same way as the Passenger pigeon, sometimes in an oak wood, and sometimes in the grain fields.

The Prairie chicken of the plains of Eastern Oregon and Washington, particularly

in the vicinity of The Dalles and Goldendale, is the Columbian sharp-tailed or pin-tailed variety (*Pediæctes phasianellus campestris* or *Columbianus*, Ord.), and is about the same size as the bird whose range is east of the Rockies. These two varieties have many points of resemblance, but the Oregon bird seems more closely allied, in appearance at least, to the ptarmigan.

The great wheat fields of Eastern Oregon and Washington, particularly in the vicinity of the Columbia River, furnish the best hunting ground for the Prairie chicken; and there, on a crisp October or November day,

he will soon find that, no matter how willing, the dog will not be equal to the task. Ordinarily, a couple of hours' hunting morning and evening, if the sportsman knows the country, will suffice to fill a bag of due proportion.

The Gray grouse (*Dendragapus obscurus fuliginosus* Ridgw.) is the climatic modification of the Dusky grouse which is so common west of the Coast Range in Oregon; while the other climatic variation, which is found east of that range, as well as Richardson's variety, whose range is more particularly in the Rockies, differs only slightly in



THIS IS THE GROUSE THE DOGS ARE POINTING, ON PAGE 562.

with a good dog, or, better, two dogs, either setter or pointer, sport may be found fit for the most exacting. In habit these birds differ very little from their Eastern relatives. They lie well, will flush readily, and, while in bands at first, their flight is not far; and when scattered, as they usually are after being flushed once or twice, they are more easily taken in pairs or singly. If the day is warm, the dog is likely to have more than he can attend to. Water is not plentiful on the shooting ground, and the hunter who knows his business will remember this and provide for his dog accordingly; otherwise

form, size, color, or habit, from the Gray grouse. With the exception of the Sage hen, this is the largest grouse in North America. One is not always sure, in fact, that there is any real necessity for a different species being ascribed to these birds. On the other hand, hunters with a practical knowledge of them will claim that there are points of difference among these three birds, and at least one other kind found there, which well entitles what they call the Blue grouse—but which is classed by ornithologists among the Gray grouse—to a distinct place as a species in itself.

The habitat of the Gray grouse is everywhere below the snow line, but more especially in the lower mountain ranges and in the foothills and in the timber along streams, or bordering on farming regions. A recluse, shy and wary, the advance of man into the wilderness seems to drive it back and limit its range, until in time its fate may be that of the Indian and the buffalo.

Morning and evening these birds will leave the cover of the woods for the nearest field or pasture, to feed, and it is at such times that the hunter can best find them. They will lie well to the dog; when flushed, their flight is strong and rapid, but not long, as they only aim to reach the nearest cover. Usually they are in flocks, and if so, the hunter must ordinarily do what execution he can, for he may not get another chance at that lot. At times, when found far afield, they may be scattered, and thus put up singly or in pairs. In regions remote from farms, they are hunted in "burns" on the hill or mountain side in the same way. As in all sport of this kind, a good dog is needed. The bird, when only wounded, will lie perfectly still where it falls, until found by the dog, or almost stepped on by the hunter.

The flesh of the Gray grouse, especially of the young birds, is not inferior to the quail or the Ruffed grouse. It is only occasionally, during the winter season and in the higher mountain regions, where food of other kinds is scarce, that it feeds on spruce or fir buds; then its flesh is somewhat astringent, and not so palatable.

One peculiarity of these birds, not common, it seems, to other species of the grouse family in this country, is their habit, when put to flight, of alighting in the top of high trees, if any are near, and almost concealing themselves in the foliage. As the trees in Oregon are ordinarily rather tall, not infrequently reaching a height of more than two hundred and fifty feet, a bird in such a situation is safe enough so long as he remains still; and this fact he seems to understand so perfectly, as to make a libel the name "fool grouse," sometimes given him by superficial observers. Under such circumstances, the hunter might as well move on, although, as frequently happens, he has seen the bird alight in a particular tree. The best advice to the man behind the gun, in such cases, is not to let the bird go there.

While the Gray grouse, as has been said, holds an important place in the estimation

of the Western hunter, it is still true that there, as in the East, the Ruffed grouse occupies a place quite apart from any other game-bird. The Oregon, or Red Ruffed grouse (*Bonasa umbellus sabini* Dougl.), seems to have taken advantage, to the full, of better food and more agreeable climatic conditions, to develop into a bird more stately and handsome than its Eastern prototype; for it is, in fact, the handsomest bird of its kind.

Not plentiful south of the California line, it is found generally northward, and especially along the Coast eastward to the Cascades. Here, as in other parts of the country, the pot-hunter and his cur dog exist to vex the world with their methods; and yet, notwithstanding this, the royal favorite lives and thrives; and wise laws and the intelligence of the people may serve to prolong its days and save it from extinction.

An account of the upland shooting of this region would not be complete without a reference to the Sage hen, the "cock of the plains," of Lewis and Clarke (*Centrocercus urophasianus*), the largest of all North American grouse, which has its range in Oregon and Washington, east of the Cascades. As its name indicates, it lives mostly in the sage-brush country, and while its flesh is at times flavored too strongly with the taste of the sage buds, upon which it feeds, this is not always so; and when its diet is insects or grain, it is a very good food. It does not take to flight readily. In fact, in hunting this bird a dog is very much needed to find and flush the game, as, when only a man is near, it will frequently lie until stepped on. It also trusts much to its legs for safety. When flushed, its flight is rapid and strong, and it is generally believed that it can carry more lead than any bird of its kind.

It is somewhat odd that the only example of the pheasant family native to North America is our wild turkey. But one imported bird of this family, the Ring-necked pheasant (*Phasianus torquatus*), has made itself so much at home in Oregon as almost to entitle it to the right of birth.

When Judge O. N. Denny, of Lafayette, Oregon, whose death, lately announced, brings regret and sorrow to many friends, was U. S. Consul at Shanghai, China, he became interested, as a true sportsman

might, in the pheasants of that country; and a careful study of the conditions under which they thrive there, and a comparison with the conditions in Western Oregon, satisfied him that the experiment of introducing some of the birds into Oregon was worth trying. Being a man of action, he sent a number, consisting of several varieties, to Portland, but owing to unfortunate circumstances, this proved a failure, so far as introducing the birds into Oregon was concerned. When Judge Denny returned home, about 1882, he brought with him about twenty-eight birds, all Ring-necked pheasants, and these were turned loose in the Willamette Valley, not far from Salem, Oregon. A law was passed by the Oregon Legislature, prohibiting the killing or taking of them for a certain time. The result was that, when the limitation of time expired, about 1895, the birds had so increased, that all of the Willamette Valley was well stocked, and they have now gone into other parts of the State and across the Columbia, into Washington.

Some restrictions, in addition to the usual close season, have been imposed, such as that they shall only be sold during one month of the open season, and that no person can kill more than twenty birds in

a day. This last may seem an example of true Western liberality, when the size and kind of the birds are considered. While the slaughter has been great, and while greater restrictions will probably be necessary, the birds are in many places very abundant.

It is not casting any reflections on the native game-birds to say that the result of Judge Denny's foresight has been that there exists in Western Oregon to-day the best upland shooting, outside of private preserves, anywhere in the United States; and that as a food supply they are fully equal, in all respects, to the Ruffed grouse. In fact, it is hard to imagine a more delicate morsel than a young "Denny" pheasant properly cooked.

No better place for upland shooting exists than Western Oregon, especially the great wheat and fruit regions of the Willamette Valley. This bird has a natural home in these large farms, hundreds, sometimes thousands, of acres in extent. It is gregarious, and does not shun human habitations. One of the most likely places to find it is in a vegetable garden near a farm-house.

Owing, probably, to certain inherited tendencies, hunting this game differs from any other form of upland shooting. The



GROUND THE MONGOLIAN PHEASANT FREQUENTS.

birds are found frequently, especially early in the shooting season, in numbers together; later, when they have been more shot at, they will be alone or in pairs. But even when numbers are together, they will not usually all flush at once. They will not flush at all, in fact, at times, unless compelled to do so by dog or hunter. A dog may have been ever so good on quail or grouse, and yet a day after, these pheasants will make him feel that life is indeed hopeless; and this is likely to continue until he has had several days at the work.

Some hunters assert that pheasants will stand well. So they will, at times, and to a dog that knows his bird. On a wet, cold morning, when the grass is heavy with dew or rain, and the plumage of the bird is damp, they are not inclined to flush, but will either stand well or trust to their legs. On the other hand, they may, on a dry day, flush half a mile away. Again, they may be pointed by the dog, and instead of waiting for the hunter to come up, will sneak off at a lightning pace, causing the dog, unless he follows up, to lose the scent altogether. At such times, the result is likely to be something resembling a sprinting match between the bird and the dog; much to the discomfort of the hunter, if the day be warm. But this is not likely to occur save with an old cock, who knows the ways of the world.

Pheasants, ordinarily, live in the open, feeding morning and evening in the stubble or pasture, and toward noon retiring to some vine-maple wood, or a stream lined with brush, or along the swales, or on the long grass in the open fields. When flushed, they are liable to fly to the nearest cover of trees, if not too far away; and although they alight on trees at times, they seldom remain there, but will drop to the ground and run. Birds a year old, or less, are about as hard to kill as a Prairie chicken, and an old male bird can carry away as much shot as a full-grown Sage cock. It may fall dead a mile or more

away, only to be lost to the hunter. Therefore, in shooting them, a good charge, well loaded, and a gun, well handled, must be used. They are very strong and rapid flyers; they will frequently get up in a direction opposite to that expected; and this may all happen with the dog at a dead point, or set.

This kind of work is well calculated to tax the skill and endurance of dog and man; and if the day be warm and dry, the dog will need to seek water frequently, or he cannot succeed. Dogs have been known to give up, and refuse to work at all, under such conditions; and in this they were sometimes wiser than their masters. Two dogs should be used; or, if one is used, another should be kept in reserve to relieve the first when he is overworked. A good retriever, used in the English way, for retrieving alone, saves the other dog much labor. As a general thing, a strong, active, well-trained pointer will do more work than a setter.

A pheasant that is only winged, and has the use of his legs, especially if full grown, needs very prompt attention after he drops, or he is almost surely lost. It is surprising to find how many cripples will, through one fault or another, be lost. Indeed, many hunters claim that, when evading pursuit, they throw their scent; and while on this point there has been some controversy, there is no doubt at all that the best dogs at times lose birds, under conditions which make their disappearance almost uncanny; and enough is known now, to convince hunters that the only dogs for this work are those that are specially trained.

With a pair of such dogs, and the goodwill of a few of the farmers in almost any part of the Willamette Valley, and other necessary accompaniments, a man can have a day's shooting that will ever, thereafter, be a day to dream upon, a day of blessed memory; and he will admit that this country has acquired from China at least one thing to inspire gratitude.

SONG OF THE BEAST

By Herbert Shipman

“SONG of the Beast” is this, and beast am I.
These words are the words of my far-heard cry:
“Ya—oh, Ya—oh!” for the hunting is good,
The killer feeds where the quarry stood.
The weaker shall be for the strong to take,
And the life of each for another’s sake.
Kill, kill what you can, and eat what you can—
And O, for the strength of the King-beast, Man!
The timorous things that tremble and hide,
The starveling fawn by the dead doe’s side,
The weakling that fell when the pack moved on,
The weanling that bleats for its mother gone,
And huddles in useless and hopeless fear
When that it shall nourish is drawing near:
Mine, mine are all these, to take and to slay;
Mine are their lives, who am stronger than they;
I feed to my fill, and the leaves drip red—
And far off I scent the thing that I dread!

For this is the law, the law of the beast:
The greater the less, the lesser the least,
Shall harry, and take, and kill, as he can—
O, give me the strength of the King-beast, Man!
The hunting is good in the shadowed wood,
But the man-beast feeds on a better food;
The quarry is sure for talons and fangs,
But dread on the flanks of the dreaded hangs!
Give me the heart and the strength of a man,
Give me the mind that can think and plan;
Give me man’s secret, to feed to my fill,
And then, for the joy of killing, to kill.
Wild-beast am I, and my prey know my call;
The man-beast that thinks, is master of all.

O, the blood lies thick by the wood-stream’s flow,
Where the weaker fell to the stronger’s blow;
And the blood is wet on the rending claw,
For the beast must live by the wild-beast law:
The stronger shall win in the endless strife,
The strong ones shall live on the weak ones’ life.
Strongest of all—is it part of the plan?—
And the king and ruler of all, is—Man!

WITH SAIL AND PADDLE IN THE SOUTH SEAS

By W. M. Clemens



THE semi-savage of the South Sea Islands is by birth and tradition a son of Neptune. Half his life is spent upon the water. He is an expert with paddle and oar, and an adept in the handling of a sail. In the building of a canoe well may he be looked upon as an inventive genius, and in sailing he finds his greatest joy in life.

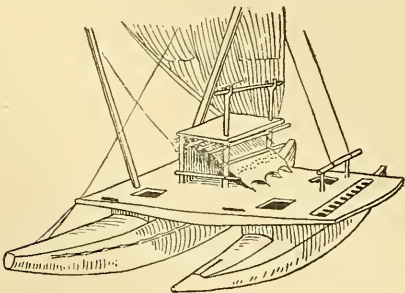
The canoe is as much a part of native habit and custom in the islands of the South Pacific as food and fire, even as clothes—or rather, I should say, as the lack of clothes. A year spent in and among the various groups of sun-kissed isles will convince the American or the European that as regards many things the barbaric races know more than the men of civilization. This, perhaps, is especially true of canoe building and canoe sailing.

The variety in the size, material, construction, and equipment of the canoes found in the South Pacific is the more remarkable, when one pauses to consider that the natives of the various groups of islands undoubtedly came from a common Polynesian race, centuries ago. The custom and habit that naturally follow isolation account, perhaps, for the present variety.

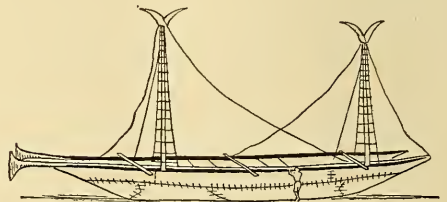
What is, perhaps, the largest canoe to be found among all the islands of the South Seas, is peculiar to Tonga, one of the Friendly Isles of Cook, or what are

known as the Hapai group. This canoe, built especially for the use of the island kings, is one hundred feet in length. It is of double construction, consisting of two canoes of different sizes, joined together by a deck thrown across them. A small house or cabin is built upon the deck, which serves to keep off the wind and rain. Above the house is a small platform, about eight feet square, with a railing on each side. The mast, which is upward of thirty feet in length, is supported by guys, having a long yard attached to it, with a furled wort-sail of huge dimensions.

In all the Tonga canoes, both double and single, small hatchways are left at both ends, with high combings. When under way, men are stationed in the hatchways to bail out the water. The mode of these islanders in propelling their canoes by sculling is peculiar to both the Tongese and the Feejees. Instead of using the oar as we do, the sculler stands behind it, and holds it perpendicularly. The oar, which is ten feet in length, has a very broad blade. The sculler has the whole weight of his body to assist his strength in using it. With one of these ten-foot oars at either end the natives are enabled to propel their canoes between two and three miles an hour. The Tongese are remarkably adept in managing their boats when under sail.



FIJI CANOE.



DOUBLE CANOE OF THE PAUMOTU GROUP.

When the large canoes of the Tongese are drawn up on the shore, they are housed in large pavilions of cane built generally in close proximity to large trees, which furnish a shelter from the hurricanes that prevail in the islands during the rainy season.

The double canoes found in the Paumotu group, and particularly on the island of Raraka, differ materially from those of Tonga. The most noticeable variation lies in the fact that the Raraka canoe carries two masts. These queer vessels are peculiarly primitive. The twin canoes are thirty-five feet long and four and a half feet wide, connected together by a strong framework, on which is placed a deck, and a temporary hut is erected on their voyages. Every part is neatly put together, and well secured with twine and sennit made of cocoanut fibers; no iron or metal of any kind is used in their construction; they have two masts, supported by vines in place of ropes, and are enabled to spread large mat sails. They steer with a large oar. After examining them, one can easily account for the long voyages which the natives have been sometimes able to accomplish. They find no difficulty in navigating them, and although learning the use of the compass, they still prefer sailing by the stars and sun, and seldom make any material error.

The single canoe used by these same Paumotu islanders is best exemplified by those found on Wytoohee or Disappointment Island. They are quite small, being only from twelve to fifteen feet long. They generally carry two, and sometimes three, natives. Each canoe has an outrigger and a projecting point, both before and behind, by which they get into them from the water. They are formed of strips of cocoanut wood sewed together. Two persons can carry them. Their paddles are curved backwards.

In those little-known isles lying far to the south, classified as belonging to the Union group, the double canoe is again in evidence, those native to Duke of York's Island being constructed of pieces of wood sewed together and ornamented with white ovula shells. The blades of their paddles are oblong and slender. The single canoes of the Union group islanders are partly decked over the forward part, carry outrigger, and are propelled by long paddle with slender blade.

The canoes of the Fiji, Feejee, or, as sometimes called, Viti Islands, are in many re-

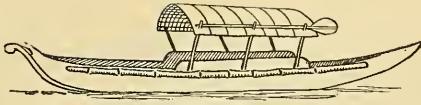


TONGA ISLANDER.

spects superior to those of the other South Pacific groups. There are two hundred and twenty-five isles in the Feejee territory, and, I should judge, fully as many kinds of canoes. The more common sort, however, are generally built double, the largest being ninety feet in length. They are united by beams, upon which platforms are built to the width of fifteen feet. The bottom of each canoe is of a single plank. The sides are fitted to them by dovetailing, and closely united by lashings passed through flanges left on each of the pieces. The joints are closed by the gum of the breadfruit tree, which is also used for painting them over. They have generally a depth of hold about seven feet, and the two ends, for a length of about twenty feet, are decked over to prevent the canoe from shipping seas. Amidships they generally have a small thatched house or cuddy to protect the crew from the weather, above which is a staging, on which there is space



FIJI ISLANDER.



MANILA BANCA.



SULU.

for several people to sit. The frames of the canoes which belong to chiefs are much ornamented with shells.

The sails are so large as to appear out of all proportion to the vessel, and are made of tough yet pliable mats. The mast is about half the length of the canoe, and the yard and boom are usually twice as long as the mast. The mast is stepped on deck in a chock. The halyards are passed over a crescent on the head of the mast. These are bent on nearly the length of the mast, from the tack of the yard. The natives are very expert in managing these vessels, and it requires no small skill, in beating against the wind, to do so.

In sailing the canoe, it is always necessary that the outrigger should be toward the weather side. This is easily effected by proper care; the mode of tacking becomes, therefore, curious, and is performed by putting the helm up, instead of down. When the wind is thus brought aft, the tack of the sail is carried to the other end of the canoe, which becomes the bow, and the course of the other tack is then pursued. The boats are made of logs hollowed out and then built upon, and show great ingenuity.

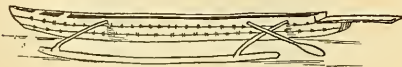
In the larger or state canoes it is the custom of the king or chief to hold the end of the sheet; thus it is his task to prevent the danger of upsetting. They steer with an oar having a large blade. In smooth water these canoes sail with great swiftness, but from the weight and force of the sail they are much strained, leaking at times very badly, requiring always one and sometimes two men to be constantly bailing out the water.

Notwithstanding all this, they make very long voyages—to Tonga and the Samoan Islands. The canoes are generally built of the *vas* wood. The planks are brought into shape by small ribs, almost exactly as in our mode of boat building.

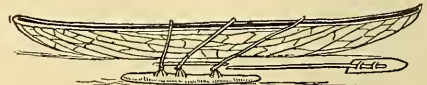
When a Feejee chief requires a canoe to be built he applies to the head carpenter, whose title is *rokola*, and whose office is hereditary. He is a person of great consequence, and the workmen constitute a caste, in which the trade is hereditary also. The chief gives the *rokola* a whale's tooth as a fee, and pays him for the work, not even feeding the workmen, who are paid by the *rokola*, and provide themselves with food. With great exertion a canoe may be built in three or four months, but it usually takes as many years. The principal tool of the carpenters is an adze, which, since the introduction of foreign tools, they make by lashing with sennit a plane-iron to a crooked handle. They also use the chisel and knife. For boring holes they use long spines of the *echina*, sharp bones, and nails.

In the Feejee group the larger single canoes, generally used on state occasions by the chiefs, resemble in many ways the canoes of the Tongese. They are canoes one hundred feet in length, and carry immense sails made of white mats. An outrigger of large size is carried, and this is ornamented with hundreds of ovula shells. The boats are sailed with great velocity and adroitness.

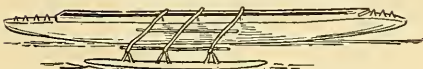
Human sacrifice in years past was practiced in the Feejees, and when a large canoe was launched the first stranger to appear upon the scene, man or woman, was laid



COMMON TAHITIAN CANOE.



KINGSMILL CANOE.



UNION GROUP CANOE.



CANOE OF WYTOOHEE.

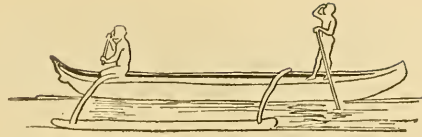
hold of, killed, and carried home for a feast.

Among the Samoans the building of canoes is a distinct trade, and the natives display great skill in their workmanship. The fishing canoe is made of a single tree, with a small outrigger to balance it. In the Samoan Islands there are no large double canoes, as in Tonga and the Feejees. The largest canoes are from thirty to sixty feet in length. They are formed of several pieces of plank, fastened together with sennit. These pieces are of no regular size or shape. On the edge of each plank is a ledge or projection which serves to attach the sennit, and to connect and bind it closely to the adjoining one. It is surprising to see the labor bestowed on uniting so many small pieces, where large and good planks might be obtained. Before the pieces are joined the gum from the bark of the breadfruit tree is used to cement them and prevent leakage.

In these canoes the stranger or guest is placed in the seat of honor on the forward deck, in the center of which is a row of pegs, to which large white ovula shells are attached by way of ornament. The natives find no difficulty in occupying this place, as they manage to sit in almost any position with ease to themselves; but a stranger who attempts it, and is for any time confined to one of these places of honor, will repent the distinction he enjoys before many minutes are over.

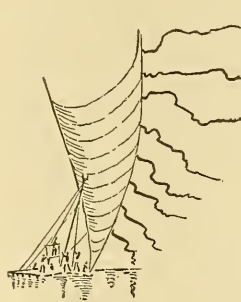
Having both a prow and stern, these canoes cannot be maneuvered without tacking; consequently the outrigger, that constitutes their safety, is, in using their sail, alternately to leeward and windward, and does not, when to leeward, add much to the stability of the canoe. They carry less sail than the canoes of the other natives of Polynesia, and to guard against the danger of upsetting, the natives rig a sprit or boom, projecting from the opposite side to that on which the outrigger is fitted. This boom is secured with guys to the top of the mast. When the wind blows fresh some of the men go out upon it, and thus balance, or counteract the force of the wind.

In the Kingsmill Islands the natives build small canoes twelve to fifteen feet in length. They are from two to three feet deep, and vary from fifteen inches to two feet in width. Each canoe has six or eight timbers in its construction. They are well modeled, built in frames, and have much sheer. The boards are cut from the

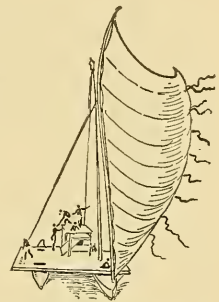


SANDWICH ISLAND CANOEISTS, HAWAII.

cocoanut tree, from a few inches to six or eight feet long, and vary from five to seven inches in width. These are arranged as is the planking of a vessel, and very neatly put together, being sewn with sennit. For the purpose of making them water-tight they use a slip of the pandanus leaf, inserted as coopers do in flagging a cask. They have evinced much ingenuity in attaching the up-



FIJI CANOE.



DOUBLE CANOE OF THE TONGA ISLANDS.

right to the flat timbers, which are so secured as to have all the motion of a double joint, which gives them ease and comparative security in a seaway, and thus renders them capable of withstanding the waves. They use an outrigger, much smaller than those of other islands, and the staging or platform covers less space.



TONGA IN CANOE HOUSE.

The natives are expert at managing their canoes, and seldom use their paddles, which are miserably made of a piece of cocoanut board or tortoise shell, about six inches square, attached to a round stick. On this account they prefer using their sails. These are triangular, with an inclined or raking mast. They are worked in sailing precisely as those in the Feejee Islands, keeping the outrigger always to windward, and tacking in the same way. Their masts are in two or three pieces, as well as the yards, and the whole construction shows that wood is exceedingly scarce, and that it is very difficult to procure enough of it, as a cocoanut tree, of which they are made, will yield only two planks.

In our new Philippine possessions the canoe, which is called a *banca*, is built from a single tree trunk. Those used in and about Manila as passenger craft have a sort of awning to protect the occupants from the rays of the sun. Being light, they are easily rowed about, although they are exceedingly uncomfortable to sit in, from the lowness of the seats; and liable to upset if the weight is not placed near the bottom. The outrigger is dispensed with, owing to the impediment offered in the navigation of the Manila canals.

In the Sulu Islands, at the southern end of the Philippine group, the natives not only have the outrigger on their canoes, but make use of a double outrigger, which consequently gives them additional security. The paddle has a blade at each end, which are used alternately, thus enabling a single person to manage them with ease. These canoes are made of a single log, though in some cases the single log is used as a basis to be built upon. They seldom carry more than two persons.

On the island of Tahiti the natives construct the bottom of their canoes of one piece of timber. They use an outrigger, and have a projection over the stern for use in landing. The paddle or oar is short, with a wide, spoon-shaped blade.

In the Chatham Islands, near New Zealand, the natives known as Maoris are almost extinct. Their boats differ greatly from those of the other South Sea Islanders. They have no true canoe, but a heavy, built-up craft that is pulled with difficulty, though it is very staunch in a rough sea. The islands had no timber big enough to be hollowed into canoes, and for this reason the raft principle was substituted. The rafts were floored with the flower stalks of a plant. These boats were big enough to carry sixty or seventy persons, and were propelled by paddles. The Maoris carried fire on their boats, and had on the floor hearth-like arrangements of stone and earth for the embers to rest upon.

The canoes used by the natives of the Hawaiian Islands are small, and similar to the single craft of the Feejees. They are not remarkable for beauty, or construction, and are used largely for fishing alongshore. It is very interesting to see the natives out surf-riding in their canoes when the surf comes in pretty heavily over the reefs. It is an excitement which many strangers who visit Honolulu join in. The natives paddle out beyond the surf and then approach carefully and diagonally to the surf line, keeping just behind the breaks, and ride in swiftly on the curve or swell with much shouting and laughter. Tourists who join in the fun should go in their bathing-suits, as the canoes often get filled with water.



FIJI ISLAND CANOE PADDLE.

WILD BLACK DUCKS FOR DECOYS

By G. C. Watson

IN many places in Northeastern United States, where ducks still abound during a considerable portion of the year, the sportsman who takes keen delight in outdoor exercise, and who thoroughly enjoys the excitement of a day's duck shooting, often finds the sport materially enhanced if he has provided himself with some more effective means of attracting ducks than the cedar blocks sold under the name of "wooden decoys," and which will not suffice to bring within range the old "blackie." It may be surprising to many, to learn how quickly the old and experienced birds distinguish between live ducks and wooden decoys, after they once suspect them. Live ducks in motion on the water, and possessing the natural wild voice, after close scrutiny by the most suspicious, will suffice to win their confidence. If, however, they have learned to avoid small flocks which resemble decoys, they will frequently alight, in pairs or singly, and refuse to be enticed by the most deceptive of live decoys. Experience has taught that the live decoy, which nearly approaches in form, color, and voice the wily black duck, will, when properly prepared for the critical moment, prove more efficient, by far, than any inanimate representative.

In order to meet the above conditions, the skill of the sportsman is oft-times taxed to its utmost to provide a decoy sufficiently alluring for those birds which are most mistrustful of any device that appears to be arranged by man.

Wild black ducks which have been winged, if not otherwise injured, and captured alive, may form the foundation stock for a flock of wild black ducks, which, under favorable conditions, will become quite tame, and may be easily managed. The offspring of these wild parents make most excellent decoys. The size, voice, and plumage of the half and three quarter blood differ so little in efficiency from the full-blood wild black duck reared in con-

finement, particularly if small gray ducks have been used in making the crosses, that it is hardly worth while to incur the extra expense and trouble of rearing the pure-bred wild black ducks; and half-blood and three-quarter-blood wild black ducks are much easier to breed than are their wilder relatives, and very much more easily managed in the breeding-pens, in the crate, and on the water. Whenever the full-blood wild decoy escapes from the hunter, on the marsh or stream, it is, to all intents and purposes, a wild bird, and can rarely be recaptured alive.

It not infrequently happens that the first attempt to breed full-blood wild black ducks results in disappointment, due solely to the failure of the birds to breed in close confinement. During the second year, however, they become somewhat more accustomed to their locality and will often prove more satisfactory. While wild black ducks will mate during the breeding season, yet the wild male will frequently mate with small, tame gray ducks, should the wild companion not be provided for him. If great care is exercised in selecting small gray tame ducks, which are to be crossed with the wild male, the half-blood progeny will prove almost, if not quite, as satisfactory as the three-quarter-blood or full-blood wild birds. Even the experienced eye cannot always distinguish a wild black duck in a bunch of half-blood decoys, providing one is permitted to alight among them. Small gray tame ducks are frequently used for decoys, but because their appearance on the water, and their voice, are so materially different from those of the wild black ducks, they are not equal to the wild birds at the critical moment, when the most suspicious are to be enticed.

It is necessary to keep one wing of all black ducks, which are one half or more wild, closely clipped. If the first one or two primaries be left full length, they will assist materially in folding the wing nat-

urally and in holding it in the proper position. A mistake is sometimes made in clipping the feathers of both wings. This enables the wild bird to take a moderate flight, at least sufficient to escape from ordinary enclosure. Pens, or yards, of considerable size are preferable. Full-blood wild black ducks are more likely to breed if allowed considerable range, particularly if a portion of the run is slightly wooded, or more or less wild, and is not disturbed during the breeding season.

The young wild ducks are much more hardy than the young of the domesticated breeds, and do not require such close attention on the part of the breeder. They seem able to endure the long rambles in the wet grass during the early morning much better than do those of the same age which are farther removed from the wild state. The old duck is also better able to provide food for the young than is the mother duck of domestication. However, feeding should not be neglected, and the food supplied to tame ducks will answer every purpose. It is necessary to exercise watchfulness during the moulting period of the parent stock, and also to guard closely the young when they are coming into full plumage, or they will escape. Even three-quarter and half-blood birds, which have been reared with domestic ducks about the farmyard, will take flight during the early spring or autumn—the flight period of migratory birds. Under ordinary conditions, half-blood, and even three-quarter-blood, wild black ducks may be reared with the ordinary domesticated breeds, particularly if they are not permitted to frequent a stream or large pond. Partially wild birds, after having once gained access to a stream, will frequently not return to their accustomed quarters with the tame birds, but will wander farther and farther from home, and, to all intents and purposes, are lost to domestication.

The experienced duck hunter is fully acquainted with the greater value of certain members of his flock. Generally speaking, the ducks are much more valuable than the drakes, and this is particularly true of young birds, or those reared during the season in which they are used for the first time as decoys. Young birds are more susceptible, at first, to fright, when anchored in unaccustomed

places on the water, than are the tried and older ones. When an unusually good bird is secured, it is on every occasion given the most exposed and the most valuable place in the flock, and the young, untried birds placed in-shore, where better protection is secured them. Wild ducks, like tame ones, vary materially in the disposition to use the voice. A wild decoy, which is a good caller, is much more highly prized than a bird which remains silent on all occasions. Not only is the voice of great assistance in enticing when the birds are flying, but the call will frequently cause birds to take flight and approach the decoys.

Wild ducks are much more closely feathered than tame ones, and, consequently, withstand cold weather better. Their feathers appear to be more oily; certain it is, that wild or half-wild birds will remain very much longer on the water than domesticated ducks without their feathers becoming wet or water-soaked. If the birds which are to be used as decoys have frequent opportunity to swim on ponds or streams, they will be able to endure longer-continued service as decoys than will those birds which are reared without swimming or bathing privileges. When its feathers become wet on a cold day, the bird soon shivers, and it should then be taken up and placed in a box, or crate, to dress its plumage and dry off.

Young birds frequently so closely resemble one another that it is difficult to distinguish between the sexes. However, if they are caught and held by the legs, and given considerable motion at arm's length—as tossing up and down in the air—they can mostly be distinguished by the voice. The ducks usually have much darker bills than the drakes, and this alone is generally a sufficient mark of distinction. Young birds are much more likely to become frightened, and “tug” or pull at the anchor when once put out for service in the pond or bay, as the case may be. When individuals of the bunch of decoys become frightened, and flop their wings or use their voices in an excited manner, they fail to prove the most useful; but even under these trying conditions, the ducks are to be preferred to the drakes.

Members of a flock of decoys often become decidedly attached to one another. If one is left in a box by itself, in the boat

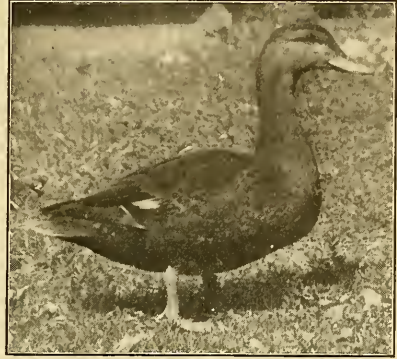
with the hunter, where it cannot see the other decoys on the water, it will frequently call to them, and will be answered by its mates which are doing service. This calling by a few may serve the purpose of attracting other birds, particularly if there are numerous small ponds near by, on which ducks are feeding. A good bunch of decoys should consist of a dozen or more. While a few birds will suffice to draw in single birds, pairs, and even small flocks, yet a large bunch of decoys will much more surely attract large flocks.

The wild decoys are anchored out by means of a strong cord attached to a weight, or anchor, sufficient to hold them in the desired positions. The anchor should be of such size and form as to make it practically immovable, although the ducks should do their utmost at swimming, and even use their wings to aid locomotion. The cord holding the ducks should be of sufficient length to permit them to swim about a radius of a few feet. When permitted to do this, and anchored in good feeding grounds, the decoys feed and closely resemble feeding wild ducks. It is customary to fasten pieces of well-stretched leather about each leg of the decoys. The leather should be perforated at the ends to receive hooks or snaps, which terminate the end of the anchored cord. If the end of the anchored cord is branched, and each branch is provided with a snap, or fastening, so that one end may be fastened to each leg of the duck, the decoys will not swim in a circle, and, consequently, will avoid much twisting and danger of entanglement.

In order to carry decoys conveniently, they should be placed in light, open crates or boxes. The crate should have a solid bottom, but the sides, ends, and tops may be made of light slats. A small trap-door on top, secured with a handy fastening, will prove sufficient. Some prefer to use what are called "two-story" crates—that is, one above the other, to increase the capacity; others prefer two single, and lighter crates.

In placing the decoys on the water just before the gray light of morning, the

inexperienced hunter frequently places some of the birds too far from the blind, which he has selected as his base of operations. All decoys should be well within range. A considerable number of birds, attracted by the decoys, will alight just outside of them, or at least will attempt to do so, and if the decoys are not well



THREE-QUARTER-BLOOD
WILD BLACK DUCK.

within range, many a shot will be lost. It is needless to say, that the game should not be permitted to alight among the decoys. In the early autumn, positions which will make the decoys most conspicuous should be selected, though later, when the weather is colder and the water is roughened by the wind, shelter should be selected. When there is considerable wind, leeward positions are the best. Ducks prefer to approach their feeding ground toward the wind. If the sportsman succeeds in making a few kills during the morning or evening flight, it is a doubtful expediency to pick them up at once. If, however, cripples have resulted, or a wind is blowing which would drift them out of reach, there is no other alternative than to make haste to secure those which have been brought down, even though some good shots may be lost by venturing out in the boat for this purpose. A true sportsman would decide instantly to secure the cripple, rather than to remain in the blind for the chance of another shot.

WITH FUEGIANS ON A GUANACO HUNT

By Frederick A. Cook, M. D.

THE officers of the Belgian Antarctic Expedition had, as we went southward, mapped out a guanaco hunt as one of the adventures natural to the lower end of South America. We purposed joining the Indians, rather than trying an expedition ourselves, partly because of a



IMMUNE TO COLD.

greater prospect of success, and partly because we were anxious to study the Indian hunting methods; but we learned that, only a few months previous to our arrival, two Roman Catholic priests, with noble intentions, had gone among the Indians, and all that was ever heard of them or their missionary work, was the discovery of bits of their clothing. As we were not anxious to meet a similar fate, we decided to forego the pleasure of a guanaco hunt until our return, at least; when more propitious conditions might exist. After we had been fifteen months in the frozen sea of ice, which surrounds the South Pole, we put in again at the sub-Antarctic islands of Tierra del Fuego, and though our duties were such that we could not organize a hunting party from the Belgica, by singular good fortune I met an opportunity which took me to the Fuegian wilds, among the haunts of the Indians and the guanacos.

Making my home among the *gauchos*, who herd sheep along the Strait of Magellan, I had an excellent opportunity of seeing and studying, at close range, types of the giant Onas who inhabit the mountain fastnesses of the main island of Tierra del Fuego. They are a people who do not take kindly to white men, and so many have mysteriously disappeared by their hands, that a newcomer does not easily trust himself to their mercy. But a Fuegian *gaucho* is a good companion, and is easily the match of a score of Indian warriors. With good firearms one has little to fear from these Indians in open fields, but he is a careless adventurer who trusts them in the rough, irregular country of the mountains or the forests, for at short range they are the fiercest fighters in the world. I had, as my constant companion, a shepherd who spoke English, Ona, and several other languages fluently, and among our various adventures we tried a guanaco hunt with the Indians.

We were mounted on two of the best horses of the ranch, and were armed with Winchesters. We took no camp equipment or provisions, to speak of, except a few blankets and some biscuits. The Indians took all of their belongings, and their entire families, leaving behind only the aged and the sick. We waited several days for a favorable mood of the spirits—a good moon, a friendly sun, an agreeable wind, or what not—to satisfy the superstitions of our Ona friends. At last, when our patience was almost exhausted, early one morning we heard a savage howl, followed by a series of inhuman noises, which, my companion told me, was the hunting song.

This noise was an agreeable surprise, and starting out, we saw the entire Indian colony ready for the march—the men in one group with bows and arrows, the women in another, weighted down with all their household utensils. Most of the dogs had been killed, because of their hostility to sheep; but a few were still spared, and they joined in the chorus of the song, and playfully

jumped about among the women and the children. Our path lay across the undulating plains, the pampas of the Fuegian side of the strait. Before us, about twenty-five miles away, under a quivering blue haze, was the terminating ridge of the Andes, a detachment of the Cordilleras, which here sinks eastward into the South Atlantic.

We were compelled to pick our way around swampy patches, through small streams, and over rocky hummocks. The work was easy for us on trained Fuegian horses, and it seemed still easier for the fleet-footed bucks, who, unencumbered, glided lightly along. It was otherwise, however, for the women; but they labored bravely, under their great rolls of camp equipment. The strength and endurance of these remarkable women are wonderful: hour after hour they trudged along, without a rest, without a word of complaint, always singing, always happy and contented.

Late in the afternoon we came to the first hills, which marked the termination of the vast, grassy plain. We had seen no game, and the Indians said we should not until we got farther up among the hills. About us there were bunches of califate bushes, which the women and the children quickly gathered for a camp fire.

My companion found a comfortable nook under a califate bush on a small elevation, high enough to give us a commanding view of the Indian camp, and enabling us to watch carefully the movements of our Ona friends; for we kept constantly in mind their treacherous dispositions. Dividing the time in watchee of three hours, we slept alternately, under our robes of guanaco skins. The Onas threw up a sort of crescent embankment of bush against the wind, within which they had a brisk fire, and stowed themselves in all sorts of sitting and lying positions.

As the sun rose out of the sea, over the snow-capped hills, the dogs, the women, and the children began their morning howl, the usual song of the chase. The low, melancholy, but piercing sounds almost drove despair to our hearts, and it certainly must have frightened all of the game within ten miles of our camp. After a light morning meal of matta, biscuits, and half-roasted meat, we were again on the march. A sharp, piercing wind came down from the icy mountains, and as we rose higher and higher, we found frequent traces of snow, in sheltered places.

After a few hours' jaunt, the women and children were placed in a group, and told to take a winding path in the bed of a valley



FUEGIANS ON THE MARCH.

The men, with their quivers, divided into pairs, taking the dogs. Each pair took a route which made a winding path around the hills, about half-way up, and we were told to do likewise with our horses. We soon lost sight of every detachment of Indians, but later in the afternoon, as the sun sank into the Pacific behind the wind-swept island westward, we beheld a dense column of smoke rise from a sheltered gully near a great black cliff. That was the signal for camping. As we neared the camp, we saw the camel-like head and neck, and a bit of the stubby tail, of a guanaco, over a ledge of rocks within a hundred yards. Dismounting, we crept stealthily near the rock, where we might get a sure shot. When both of us were in a favorable situation, we delivered two volleys. The guanaco didn't seem to mind that. It wiggled its tail, shook its head, but did not offer to move. Going closer, we discovered that the Onas had put an arrow through the animal, but our shots had done no harm. We dispatched it, and took it to the camp.

We found the women cutting meat, and roasting it on sticks over a fire. The men rolled about with a smile of satisfaction, disposing of big strips of meat, while the children were jumping around gleefully, dividing their portion of the spoils with the dogs. The Indians kept up a gluttonous feast for hours, until they were so full that they found

comfort and relief only in rolling about and grunting. At about midnight they fell asleep, carelessly stowed about the great log fire, and slept the sleep which is the crowning joy of all wild life. It is the sight of just such a camp as this, which has given Tierra del Fuego its name, for Magellan, seeing numerous fires on the southern shores of the strait which he discovered, called the country the "Land of Fire." Our lot was decidedly uncomfortable, for we were cold, and hungry, and sleepless, though provided with better clothing and food than our wild companions.

Early on the following morning we were on a lookout for movement in the Ona camp. We were cold, hungry, and restless, and eager to begin an active chase. Even our horses were shivering, but our Indians slept, and slept, until late in the afternoon. There was no song and no life about camp—nothing indicative of action. Before sunset the women arose, shook themselves, combed their hair with a bit of whalebone, and painted their bodies from head to foot with a mixture of oil and clay, which they dried standing close to a brisk fire. This toilet completed, another feast was provided. Then the men arose. After their stomachs were well filled, all dropped again to sleep.

During the second night at this camp there was quite a fall of snow. In our vicinity the grass was only lightly covered, but the hills above us, and the high mountains far south and east, were completely mantled. We shook the snow from our beds, and bestirred ourselves very early; and the bucks soon, also, rolled out of their blankets of skins, combed their hair with a toothed bone, and besmeared themselves with clay and oil, as the women had done on the day previous. There was no song and no noise. The men were evidently making preparations for a serious hunt. They explained to us that this was ideal weather for hunting, because the snow was so deep on the highlands that the animals must seek the lowlands for food.

Taking copious drinks of water, but no breakfast, they arranged their quivers, sharpened their knives, fixed some bolas, and then they divided into groups of two, each group having a dog. While they were discussing their plans, we approached, and told them that we must accompany them and see their methods of stalking; but to this they would not agree, saying



ONA'S READY FOR THE CHASE.



AN ONA HUT.

that if we were with any one of their detachments, it would bring ill luck. As a compromise, they told us that we might take a certain route which would cross their tracks, and as we saw them we might follow; and we had to obey their orders, or seek our own pleasure as best we could.

So off we started, and had gone but a short distance when we discovered numerous fresh guanaco tracks. Taking one series of these, we followed directions. In these tracks we sneaked around low hills, down and down, until we got to a level expanse of meadow. Looking over upon this, we saw great numbers of guanaco quietly browsing. They were out of range, and there were no hills or rocks near, behind which we could steal upon them. In a fever-heat of excitement, we sat down to study their movements through our glasses. A few of the largest animals were scattered about the field, seemingly on the alert for danger. These made rapid darts here and there, their little heads rising and falling as their long necks craned to view

the surroundings. The entire herd—about two hundred—moved slowly, as they browsed the snow-strewn fields, towards a valley a mile away.

So soon as we were certain of their course, we took a short cut behind the hills. Just as we opened in the valley, we almost stumbled over three guanacos; so near were they, that we could have thrown a lasso over them. They simply stood and gazed at us in wonder and amazement. It was the first good short-range view we had had of the creatures. We were anxious not to frighten the large herd below, so we rested on our rifles and watched their peculiar actions.

They made little leaps, then they neighed like horses; but each time they faced about, watching with considerable curiosity to see our movements. It is difficult to describe this animal, because it differs so materially from any other familiar quadruped. In size it is somewhat larger than a sheep; in color it is reddish brown, with a white abdomen and flanks. In its habits it is a camel, and in its family rela-

tions it belongs to the llama. It somewhat resembles a yearling calf, if one could imagine the calf's neck drawn out to twice its usual length, its tail abbreviated, and its legs exchanged for those of a deer.

Suddenly, and without apparent reason, the three guanacos leaped into the air, sprang first to the top of a hill, and then down the valley, where we expected to see the large herd. We followed cautiously. As they joined the herd, the entire group made a stampede up the valley, past our position. We made a few quick aims, and dropped two, but the others bounded by with such speed that we almost abandoned all hope of ever seeing them again; but, following their path, we discovered that they only ran for a short distance, to a hiding place in the lee of a steep forest-covered hill. Here they all stood, seemingly sheltered from the freezing snow-charged wind, which was now driving down the ravines with great force.

As we caught sight of the guanacos again, we also saw six of the Ona hunters, creeping singly upon the herd from every side. They moved slowly, on hands and knees, with their robes lying loosely over their backs. One not familiar with Indian stalking would not have suspected that under these robes were human beings. When they got to within a few hundred yards of the animals, some one in the rear freed the dogs, which up to this time had been kept out of sight; then men and dogs rushed wildly upon the herd. There was

much snow-drifting, and the wind came with a roar, but the noise made by the Indians and the dogs rose above the storm, and was loud enough to drive terror to our hearts.

The guanacos were so completely taken by surprise at this sudden onslaught, that they crowded closely together and moved against the cliffs. The Indians left behind their bows and quivers, dropped their single robe, and rushed forward with knives and clubs. The dogs kept the guanacos bunched, while the men despatched about fifty. Then, by a lightning-like effort of the arm and knee, they broke one of the legs of each of about twenty-five more. After this the wounded beasts were allowed freedom. As these animals stumbled away, the herd suddenly took on a desperate courage, and rushed over the dogs and men, down the valley.

After the battle, the Indians picked up their robes and belongings, and returned to camp without any further attention to the game. The women were instructed to proceed to the field of action, and return with the product of the chase, while the children were detailed to herd the broken-legged guanacos for future use.

Then followed feast after feast, and sleep after sleep. In vain we tried to induce some of the Indians to return home with us; but the zenith of their happiness had come: their stomachs were full, and they had no further ambition for the present. After three days, we left them still feasting, and returned to the coast alone.



THE FUEGIAN HIGHLANDS.

AMERICAN FIGURE SKATING,

AS A RECREATION AND AN ACCOMPLISHMENT

By George H. Browne, A. M.

THE United States is the only great skating country not a member of the International Skating Union. To be sure, the winner of the first World's Championship in Speed Skating, at Amsterdam, January 6, 7, 1891, was Joseph F. Donoghue, of Newburgh, New York; but with the exception of a few entries in the toboggan competitions in the Swiss Engadine, American competitors abroad have since been conspicuous by their absence. Meanwhile, the International Skating Union has become the official head of the various skating associations of Europe, and conducts each year the two great competitions for the championship of Europe and of the

uniformity of style in the skating of them. About seven hundred such badges have been given in the last twenty-one years. This year, the British Association celebrates its majority by conducting the World's Championship Competition in Figure Skating, and holds its first individual competitions in the continental style of skating, which was carried to Europe from this country by Jackson Haines in 1863, Wm. H. Fuller in 1865, and Callie Curtis and E. T. Goodrich in 1869-70. This year the National Amateur Skating Association of America (founded in 1885) joins with the Canadian Amateur Skating Association (founded in 1888), in holding alternate



OUTSIDE FORWARD.



INSIDE FORWARD.



OUTSIDE BACK.



INSIDE BACK.

world, both in speed and figure skating. The affiliated clubs under the associations which form the union are very numerous, and their open championships often number over twenty during the season. The British National Skating Association comprises over twenty flourishing clubs, three quarters of which have tests for admission. Last year the enrolled membership was about three thousand. Only since 1896 has the Association held skating competitions; but since 1881, bronze, silver, and gold badges have been given to winners of the three National Skating Association tests, the requirements of which are characterized by great size of figures and strict

competitions for the championship of America in speed and in figure skating (the figure-skating championship in New York, January 21, the speed championship in Montreal, February 7). This year, for the first time, a Junior Championship is announced for February 1, in New York, to qualify for the National Championship of 1901. But the National Amateur Skating Association of the United States numbers only about one hundred members, over half of whom belong to the New York Athletic Club; and its direct influence over the skating clubs of the country at large has hitherto been slight. It is to be hoped that the National Association will extend

its influence and justify its title, by organizing the skating interest of this country into something like the enthusiastic activity of 1860-70, compared with which, and with skating activity abroad, the *organized* interest in skating in the United States to-day is vastly inferior.

It by no means follows, however, that the quality or the quantity of American skating is necessarily so much inferior. I believe it is not an exaggeration to say, that in no crowd of skaters in the world will the general average of graceful field skating be found higher than on Jamaica Pond, for example, or on Hammond's Pond, near Boston, in the height of the season. But it is equally true, that not more than one skater on each pond would be a good enough all-round skater to qualify for an American figure-skating competition. Why? Because there must be something wrong in the test which sets the standard of American skating, and which leaves a lover of skating in such a state of mind as this: "What a relief not to have to practice those tiresome eights any more!" I heard the champion of '93 and of '96 each say the week after he won his gold medal. "Next year, and forever afterward, I shall skate for the pleasure of skating." I shall take up the official schedule a little later; but does it seem strange that, if the best skaters are forced to practice figures that they subsequently never want to skate, even good skaters may care more for skating than

for medals—care less for figure skating as a competitive sport, as at present conducted, than for figure skating as a recreation and a graceful accomplishment?

Yet it is this very dependence of the American temperament upon competition in some form, that prevents the popular realization of the easy possibilities of figure skating as an accomplishment and recreation. Golf is said not to be a competitive sport; but even if a player indulge by himself, without the spur of a rival or the flattering encouragement of fashionable society looking on, he cannot escape a very palpable record of strokes to compete with his own best record, or the best record of the links. Now, the kind of skating that enables the young American youth to "get there" before some one else—or the kind of skating that enables him to do with fun something others "in game confederate" strive to prevent his doing, is the kind of skating which soonest catches the popular taste. All other skating, to this taste, is "fancy," an accomplishment attainable only by a select few, who are blessed with specially constructed ankles and endowed with peculiar graces.

All that is necessary to dispel this fiction is more accurate information. The skating books of the last ten years are so good that it is quite possible to learn how to skate from them, without an instructor. A little practice on right principles each day will



A CORNER OF THE RINK (BOSTON SKATING CLUB).



NEW ENGLAND RIVER SKATING—THE CHARLE, NEAR BOSTONS.

soon make accomplished figure skaters of most young hockey players, without depriving them of any of the fun of the game or any of the delights of straight-away lake and river skating. Snow puts all skating at a great disadvantage compared with other outdoor sports, and the artificially frozen ice-rink, with the close air at sixty degrees or over, is a poor substitute for hard black ice in the open. Half the fascination of skating is gone, when you can skate any time you want to. But the opportunities for skating on natural ice are on the increase. Several city park departments are providing large areas of ice in the open, by flooding, planing, and keeping clear of snow, reservations for the exclusive use of skaters. But this ice, usually, is soon so cut up by the crowds, that figure skating is difficult. More to the figure skater's purpose are the increased opportunities offered by the skating clubs that make fresh ice twice or three times a day during frost. Their experience has demonstrated that a good surface can never be made by flooding over ice already formed—the new ice, however thick, always shells off. The only way to make a smooth, solid surface is to build up by spraying. But spraying at a low temperature (near zero) is sure to make cracks, and spray ice itself will not stand the sun. The best results are obtained when the ice is kept floating; the cut-up ice may then be planed off the top by improved tools, that leave a surface like glass, and the waste repaired by new, hard ice frozen

on at the bottom. The ideal conditions are more like those provided by the Country Club, of Brookline, Mass. A brook, flowing through a beautiful glade between lightly wooded hills, is dammed so as to flood several acres, and on carnival nights, lanterns hung on the trees, which rise here and there through the ice, light up long vistas as of a veritable fairy-land. For the most part, although we possess the largest natural skating surfaces of the world, the perversity of our climate reduces us to indoor rinks and to small outdoor surfaces.

The smallness of our skating surfaces, the radical independence of our national temperament—its fondness of display and defiance of restraint—together with the sharp rock of our skates, have made small, vigorous figures of all kinds and combinations, without limit, the material of our skating; and a rhythmic swing of arms and unemployed foot, strong inclination and edge, easy shoulders, and bent supporting leg, the characteristics of our national style. The stiff knee, quiescent unemployed foot, flat sidewise shoulders, and upright pose on large curves, of British skating, we never could abide, even if we had the room. The Englishman, on his flat skate, could not achieve the great variety of our continuous figures, if he wanted to; he has not wanted to, because he has been content with his few fundamental figures, and he has got variety enough to suit his conservative taste, by skating his few figures in combination

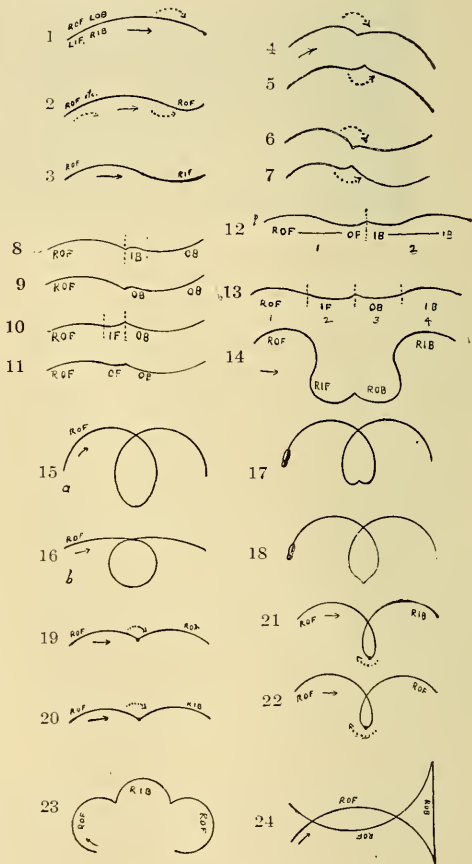
with other performers skating exactly like him. He has been brought up to believe that his style is the only style. It is the hardest; therefore, of course, the best. But within a few years he has begun to have his doubts; he is now using a sharper rock skate and trying our style, and, to his surprise, he likes it. He finds, moreover, that his early practice in securing a stable balance on large curves is of the greatest value to him in the performance of small curved figures.

The lesson should not be lost on us. The English balance is best for an American figure skater to begin with; and he can begin with it, even before he ventures on the ice, by a little home practice, which will develop the "weakest" ankles to stand all the strain required of them. Thus, stand on the right foot and look along the right shoulder; stiffen the leg, and on the ankle as a pivot, with arms hanging loosely, rotate the left shoulder and hip as far back as possible, bending the left knee just enough to raise from the floor the toe of the left foot, pointed down and back. The extreme backward position is the correct (English) position for large forward edges, inside or outside, according to the inclination of the body from the perpendicular. Repeat the exercise, looking along the left shoulder; the extreme backward position is the correct (English) position for large backward edges, inside or outside, according to inclination. The accompanying photographs show these four edges on the ice in good American form. The acquisition of good pace and balance on these edges in this style, will make American figure skating an easy accomplishment, a healthful recreation, and a joy forever. (See illustration, page 581.)

These four edges are the foundation of all figure skating, English or American. Combinations of these, in the four turns, the four changes, the four changes and turns (Q's), the four turns and changes (reverse Q's) on one foot; the Rolls, Mohawks, and Choctaws, and the turns and edges (once-back) on alternate feet, comprise practically the whole repertory of an English combined skater. The more attractive variety within easy attainability of an American skater, may be indicated briefly by the complete system of elements and types in the accompanying diagrams, Figs. I and II.

1. SINGLE CURVES.

No. 1 is the mark on the ice of each of the four simple edges. No. 2 is the forced curve. If, on the ROF, for example, the left shoulder is "Englished" too far back, the curve will be deflected without a change of edge; but it cannot be held long without a turn.



By courtesy of Barney & Berry.

FIG I. THE ELEMENTS OF FIGURE SKATING.

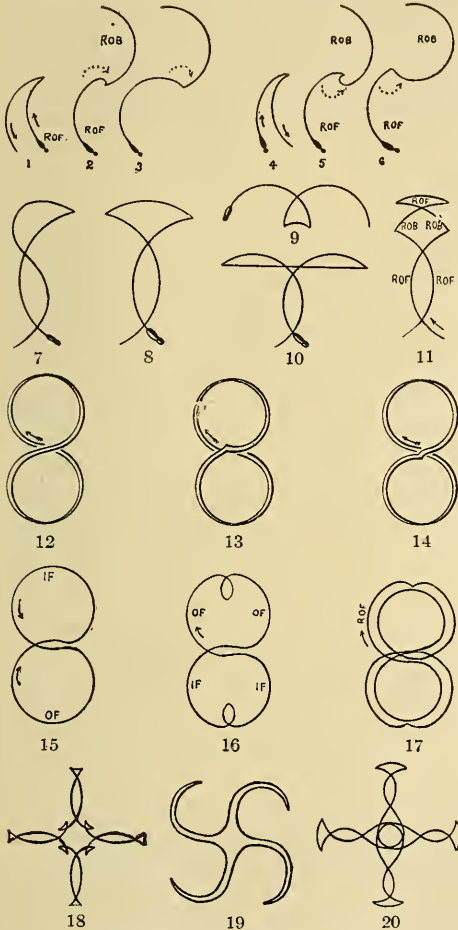
1. Simple Curve; 2. Forced Curve; 3. Serpentine; 4. Three; 5, 12, Bracket; 6, 9, Rocker; 7, 11, Counter; 8, 10, "Three Edges"; 13, 14, "Four Edges"; 15, Loop; 16, Ringlet; 17, Three Loop; 18, Bracket Loop; 19, 20, Pirouettes; 21, 22, Pirouette Loops; 23, Double Three; 24, Cross-cut or Anvil.

2. DOUBLE CURVES.

Three motions of the body combine these simple curves into double-curve elements, producing a change of edge (Serpentine, No. 3), a change of direction (Turn, Nos. 4-7), and a change of front (Rotation, on an edge, Nos. 15-18; on the point, Nos. 19-22).

3. TRIPLE CURVES.

The Double Three (23) is a unit of three curves. If the ankle is stiffened and the second curve reduced in length, this figure may be done all on one edge, and the second curve forced to a straight line; if the curves are then prolonged until they intersect, the result is the Cross-cut, or Anvil (24).



By courtesy of Barney & Berry.

FIG II. TYPES OF AMERICAN ONE-FOOT FIGURES.

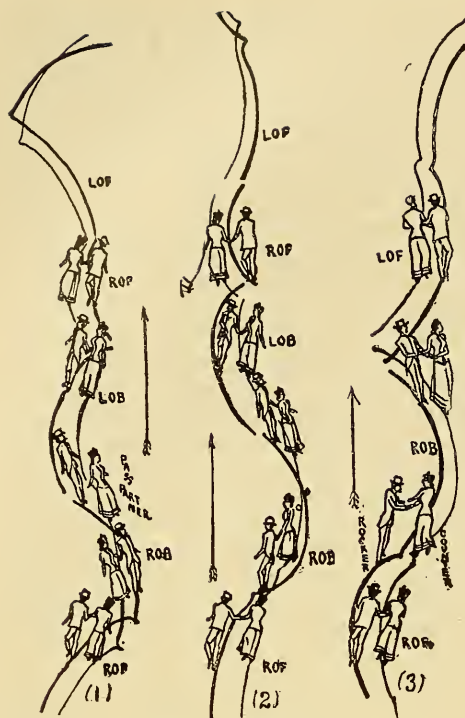
1, Beak, no rotation; 2, Beak, with rotation; 3, Rocker, without forced curve; 4-6, Counter Beak and Counter Roker; 7, Beak Q, or Pig's Ear; 8, Beak Cross-cut; 9, Counter Cross-cut; 10, Swedish Cross-cut; 11, Double Cross-cut; 12, 13, 14, Alternate one-foot Serpentine, Rocker, and Counter Eight; 15, 16, 17, Continuous one-foot Serpentine, Loop, and Double Eight; 18, Cross, no change of edge; 19, 20, Stars, with change of edge.

Of the four turns, it will be observed, Threes and Rockers turn with the clock; Brackets and Counters, counter to the clock.

Threes and Brackets have a change of edge; Rockers and Counters have no change of edge. If there is a change of edge, the figure is a reverse Q, No. 8, a simple curve and a serpentine (three edges), not a Rocker, No. 9 (one edge); or a Q, No. 10, a serpentine and a simple curve (three edges), not a Counter, No. 11 (one edge). In the same way, the continuous "four edges," No. 14, two serpentine and a turn, when skated straight, No. 13, resemble a bracket, No. 12, two forced curves of one edge each. Rockers and Counters, therefore, are legitimate figures only if the deflected curve is a forced curve, not a serpentine. Skated more like Cross-cuts, or Beaks, with half-rotation, the forced curve disappears (Fig. II, Nos. 1-6). Beaks and Counter-beaks develop new varieties of Cross-cut (Nos. 7-11), which complete our list of elements. By strokes from one foot to the other, these elements are skated together in field figures (quarter circles), Rolls (half circles), or to place as Eights (full circles).

Another type of Eight is skated on alternate feet, each foot making a complete Eight (Nos. 12-14). A still harder type is the continuous Eight on one foot (Nos. 15-17). The Cross (No. 18) and the Star (Nos. 19-20) are the only other common types of one-foot figures. There is available, also, a great variety of peculiarly American two-foot figures—grapevines, heel-and-toe figures, pivot circles, whirls, and spins—but the mere enumeration is already tiresome, and there isn't space to prove their attractiveness. When one reflects that nearly all the large curve figures and turns can be skated hand-in-hand with additional ease and exhilaration, and that the insertion of one-quarter, one-half, and full revolutions renders all of the turns available for pair-skating (partners meeting, crossing, or touching hands in a center circle, with practically no limit to the variety of the skating of the partners apart), one wonders what it is—lack of information, misinformation, or something amiss in the standard officially set by the powers that be—that makes against the wider popular realization of an accomplishment so skillful, so healthful, and so fascinating as Figure Skating.

The standard of skating, like that of horses and dogs, is undoubtedly set by the requirements of the highest competitions.



HAND-IN-HAND SKATING.

1, A hand-in-hand Rocker; 2, A hand-in-hand Counter; 3, A hand-in-hand Simultaneous Rocker and Counter. (By permission of T. Maxwell Witham, Esq., London.)

The general public, to be sure, gets along with an inferior animal, and doesn't stop breeding horses and dogs because the standard of perfection is high. The National Skating Association is not to be held responsible for the lack of popular interest in skating because its standard is so high. The standard cannot be too high; but, as already hinted, its test, compared with foreign tests, does not seem to be the kind to produce as good general results. The British have three regular grade tests and a special test; the judges are selected from accredited lists, and are helped to pass impartial judgment by strict, uniform rules of good form. The International Skating Union also selects its judges from an officially accredited board, submitted each year by the associations of the Union, and its competitions are moved from place to place each year. The programme consists of six or eight prescribed numbers selected from the official list, and five minutes' free skating at the option of the contestant.

The American schedule is more thorough;

it is arranged under twenty "comprehensive, fundamental heads, designed to include everything appertaining to the art," with two additional sections for complex movements and specialties at the option of the contestant. Each competitor is expected to skate all he knows under each head, "the number given to the one standing first in any section being that of the number of contestants." All the groups count alike—plain skating, outside edge roll forward, or outside edge roll backward, as much as the cross-roll, in field and eights, single and double circle, the continuous one-foot eight, single and double circle, or loops and ringlets, on inside or outside edges, single and in combination! If there are many contestants, therefore, a good skater may lose more points on an easy figure where all competitors are nearly alike, than he can make up in several difficult groups, where he is easily first. "In deciding the relative merits of competitors, special attention will be given to grace and ease of position, accuracy in skating to place, and ability to use both feet equally well." Turns, cross-cuts, and loops can be skated to place only in eights, crosses, and stars; over half of the twenty groups, therefore, demand place eights, six of them *continuous* eights on one foot, and in six of them *double* circle eights are specified! No quarrel can be made with such a programme on the ground that it is not difficult enough; but it may be doubted whether, as recently administered and judged, it is designed to discover the best skater or to develop the best kind of skating. We have seen what some who have passed the ordeal think of its toilsome exactions. Gustav Hgel, the world's Champion for 1899 and 1900, believes that a similar insistence, by the International Skating Union, upon accurate placing of marks is not encouraging the best kind of skating in Europe. "Practically to make good form secondary to a painful striving for mere accuracy of place (which enforces ungraceful contortions of head and shoulders, and in which a perfectly worthless stagnation point is attainable) is," he says, "a complete perversion of real artistic skating, at the expense of grace and ease of position."

By all means let the highest possible standard of all-round skating be maintained in national competitions, judged impartially in the interest—not of a set, a



PLANING A SMOOTH SKATING SURFACE (BOSTON SKATING CLUB).

locality, a theory, or a tradition, but of the widest possibilities of the art. But, also, let other encouragements be devised, if necessary (perhaps on the lines of the Skating Club tests), that shall officially recognize the possibilities of figure skating as a graceful accomplishment, attainable by ladies and gentlemen who have some of the world's work to do, and therefore have no time to learn figures which it is acknowledged to be little pleasure to skate; attainable by ladies and gentlemen who cannot

take their pleasure and recreation too seriously, and therefore prefer the sociability of hand-in-hand or pair skating, to the monotony of perfecting themselves equally on both feet, when they can do their figures in good form one way on either foot; and attainable by ladies and gentlemen who have less desire to decorate themselves with medals, than, by their example, to encourage interest in the most graceful, most exhilarating, and most fascinating of outdoor recreations.



SPRAYING ON A SKATING SURFACE (BOSTON SKATING CLUB).

(Photographs by Waldron Bates, Esq., of the Boston Club.)

ANTELOPE SHOOTING IN CAPE COLONY

By H. A. Bryden

(Author of "Gun and Camera in Southern Africa," "Kloof and Karroo, etc., etc.")

IT is quite a mistake to suppose, as many people do, that there is at the present time little game to be shot in Cape Colony. The average traveler in South Africa nowadays seldom halts long in the old Cape settlements. He is in a hurry to get up country to the diamond fields of Kimberley, or the gold fields of Johannesburg or Rhodesia. He scurries by train across the five hundred or six hundred miles that lie between the southern ports and the Orange River; he sees, especially if he travels from Cape Town, immense stretches of sun-baked, desolate-looking karoo country, upon which little of animal life is to be seen, and he at once comes to the conclusion that wild game no longer exists in the Cape Colony. There he makes a great mistake. There is still plenty of game, four-footed and feathered, to be found within the 270,000 square miles of the Old Colony, as it is called, if the wanderer is a true sportsman who understands his business, and has the time and the inclination to quit the trunk lines of railway, and seek the quieter and remoter parts of the country. Here, upon the parched karoo plains of Central Cape Colony, or in the vast and little-known wildernesses of the almost untrodden northwest, or among the wild and magnificent mountain interiors and splendid kloofs and valleys of the southern and eastern portions of the country, he will yet find a fairly plentiful store of game, and ample occupation for many a wild sporting ramble.

It is not, of course, to be supposed that the game of this part of South Africa is anything like what it used to be—in the days when lions, elephants, the rhinoceros and the hippopotamus thronged the veldt and the river, and thirty-odd species of antelope overran the country from Cape Agulhas to the Orange River. But the list of antelopes alone still to be found in Cape Colony is a not inconsiderable one. Here it is: Koodoo, gemsbok, hartebeest, bon-

tebok, springbok, vaal rhebok, rooi rhebok, klipspringer, duyker, steinbok, grysbok or grys (grizzled) steinbok, bushbuck, oribi, and blaauwbok. It is possible that a few reedbuck may be found in the eastern part of the colony; but they are very scarce, and must now be looked upon as practically exterminated. The black wildebeest, or white-tailed gnu, existed until a few years back south of the Orange River, on one or two Boer farms in the Victoria West division; but I believe these have finally vanished from the scene. These strange and grotesque-looking antelopes, thirty or forty years ago numbering tens of thousands, have now nearly disappeared even in the Orange Free State, which with Cape Colony formed their great natural stronghold. It is probable that not more than one thousand or twelve hundred black wildebeest are to be found even in that territory. These are preserved by three or four Dutch farmers, who permit Englishmen to shoot them at the rate of one hundred dollars a head! They are not likely, I fear, to escape complete extinction within the next few years.

As for other larger game in the Cape Colony proper, the lion has retired from business, exterminated by the rifles of the frontier Boers; the elephant is represented by a few strong herds which, protected by government, find a sanctuary in the dense bush veldt of the southern part of the Colony and the great forest region of the Knysna. Buffaloes, similarly protected, also haunt these regions, and, like the elephant, are only to be shot by special permit from the governor, for which a license of fifty dollars has to be paid. Only a single specimen is allowed to be shot. The hippopotamus lingers in the Orange River, finding safe harborage in a stretch of inaccessible canyons some three hundred miles in length, walled in by immense mountains of naked brown granite, the river gorges of which have never yet been explored by the white man.

A few score mountain zebras, the rarest of their kind, which are also protected by government, haunt some few of the wildest ranges of the Cape Colony. These splendid and now exceedingly scarce equines, which are found in no other part of the African continent, are, rightly enough, not permitted to be killed. Even as it is, they are preserved from extinction with great difficulty. Leopards are numerous, and are to be found in every mountain chain from the vicinity of the Cape in every part of the Colony. If a man seeks the chase of the leopard—absurdly called by the Dutch and English colonists "tiger" all over South Africa—he can find no better hunting ground in the world than the wild mountain interiors of Cape Colony.

To return now to my list of antelopes. The noble koodoo, with its magnificent spiral horns, splendid form and great size (it stands considerably higher and is more robust than a Highland stag, and weighs some two hundred pounds heavier), is at the present day principally to be found south of the Orange River, in the Uitenhage district, where considerable numbers are now preserved by English farmers. Hunting takes place during the winter months, and some good bags are made.

The gemsbok, or oryx (*oryx gazella*), is purely a desert-loving species, haunting the waterless tracts of the northwestern regions of Cape Colony—marked Great Bushmanland on the maps. This peerless beast of chase, with its warm gray coat handsomely marked with black, white head and face curiously painted with black markings, as if to imitate a headstall, and long, sharp, spearlike horns—often well over three feet in length—may still be sought in the waterless and arid grass steppes of that desolate region. Here, in company with a few bands of hartebeest and countless legions of springbok, the gemsbok grazes, thanks to scarcity of water, in fair security. Even the roaming Trek-Boers of the adjacent region find it a hard matter to bag a head of these noble antelopes, and a gemsbok slain in Bushmanland, south of the Orange River, may be looked upon as one of the prime rewards of the hunter's skill and endurance. To be lost in these deserts of the northwest is no trifling matter, and the European, unused to the veldt and ignorant of the nearest pit of water, may, if he is not careful, find himself perilously near dying of thirst.

The oryx of Africa and Arabia is, I think, without doubt the original of the fabled unicorn. The shape of the unicorn of the British arms is distinctly oryx-like, and the two long horns, when seen in profile, look exactly like one. All that the original delineator of the unicorn seems to have done was to draw an oryx with a single horn upon its forehead protruding forward instead of slanting backwards. When the gemsbok is set up at bay, especially by dogs, he will often place his head between his knees, and with the sharp points of his thirty-six-inch horns bristling outward, will deal destruction among his tormentors. The gemsbok, when attacked by a lion or other dangerous *carnivora*, often throws itself to the ground, and, presenting its horns to every side of attack, beats off its opponents. It is a curious fact that among the Hottentots and Bushmen who are principally found in the country of the oryx of South Africa, there is a persistent legend that in these encounters the gemsbok occasionally slays even the lion itself. Natives and Boers have repeatedly assured travelers that the carcasses or skeletons of lion and gemsbok, the lion impaled upon the long horns of the antelope, have been found rotting together on the plains.

The man who has once enjoyed a gallop after a troop of gemsbok is never likely to forget it. These antelopes, heavy though they appear, have a high turn of speed and great staying powers, and only the hunter mounted upon a first-rate Cape hunting horse is likely to run one down. After a desperate chase of from four to seven miles the sportsman, if the retreating game are fat and in good condition, succeeds, possibly, in turning one of the animals out of the troop and closes upon his quarry. At last the gemsbok, the spume dripping from its mouth and flecking its vinous-buff sides and thick neck, can run no longer; its bolt is shot. Halting in its tracks, it turns and faces the mounted man. Steady, my friend! this is a courageous, nay, even a dangerous antelope, and those long, spearlike horns, driven with all the force of that stout body and muscular neck, will spit a man easily through and through. Don't approach nearer, or the beast will charge you to a certainty. The rifle goes up, the report rings out, and down sinks the slain antelope, its life-blood soaking into the parched, red sandy soil. It was a desperate

gallop, and the finding of the game has been a long and tedious business amidst those scorching, sun-blasted plains. Yet that magnificent head well repays all. It is a notable fact, by the way, that unlike most other antelopes—among many of which the females are hornless altogether—the gemsbok cow carries longer and finer horns than the bull.

In the great Kalahari Desert, which stretches for hundreds of miles north of the Orange River, gemsbok are very numerous, and as they are capable of existing for six or seven months together without touching water, they are to be found in that wild, trackless and waterless waste in large troops. The Kalahari carries absolutely no surface water, except in a few pans and vleis during the summer rains. Nevertheless, curiously enough, it is well grassed and timbered, and in places maintains plenty of bush. Here, in addition to gemsbok, giraffe, eland, hartebeest, and other desert-loving antelopes, creatures all capable of sustaining life for many months together without drinking are to be found.

The hartebeest (*bubalis caama*), the Kama or Khama of the Hottentots and Bechuanas, with its handsome bay coat and long, old-fashioned-looking, narrow head, black as to the front of the face, is now scarce in Cape Colony. Occasionally it may be met with in this same Bushmanland country, towards the Orange River, but the few troops left are scant and far between. The true headquarters of this fine if quaint-looking antelope lie in the Bechuana country northward, where, especially in the park-like giraffe acacia forest regions bordering upon the Kalahari, and upon the dry grass plains, large numbers of hartebeests are to be found. No beast in Africa is fleetier or more enduring than the Cape hartebeest, with drooping quarters, high withers, and long machine-like, untiring stride. You cannot run them down, even upon the best horse in Africa. You must circumvent them. Sometimes in forest country you can get a fairly easy stalk, or, chancing suddenly upon a troop, you may obtain a shot at shortish range. A mounted hunter who understands these animals—a Boer, for instance—is able without great difficulty to bag specimens.

Hartebeests, like many other antelopes, are extremely curious, and if you will be content to canter quietly after a troop and not attempt to push them too hard, you

will find presently that the fleeing beasts will suddenly wheel round, evenly and gracefully, like a well-drilled troop of cavalry, and stand for a few minutes to stare at, and take stock of, the hunter. Then is your time. Slip off your horse, cock your rifle, and take aim at that nearest buck, the bull with the thick, rugged, corrugated horns. He is two hundred and fifty yards distant, but you may do it. Squatting on the ground, with your elbows on your knees, you take aim. If the bullet flies true you will perhaps get your buck, though even with a Martini-Henry bullet through its heart one of these tough antelopes may run two or three hundred yards. If your missile strikes too far back and wounds the hartebeest in a not immediately vital spot, the chances are you will never see your quarry again. No beast in the world is so tough; it can make its escape under such wounds as would paralyze other kinds of game. Hartebeests run in troops numbering from a dozen to as many as fifty. Larger bands are to be met with in remote and little disturbed country.

I come now to the fleet, the fecund, and the graceful springbok (*antidorcas euchore*) which, even in Cape Colony, after two hundred and fifty years of settlement, is extremely abundant over immense areas of country. Going up country from Cape Town or Port Elizabeth you will find them in considerable numbers, so soon as you have attained the plateau of the karoo region. Upon the Great Karoo, where, sixty or seventy years ago, before the pastoral farmers had spread themselves over the wild-looking terrain, the springbok ranged in uncomfortable myriads. Even at the present time, sharing the scrubby, arid-looking pasturage with sheep and Angora goats and tame ostriches, these dainty creatures may be seen flocking the vast plains in hundreds and even thousands. I do not mean to say that you will see a thousand springbok rounded up in a space of five hundred acres. But upon a twenty or thirty thousand acre run, which is no great size of farm for the karoo, you will probably find, scattered in little bands about the veldt, a thousand head or so of springbuck. I remember, when staying on a big karoo run some years ago, in the neighborhood of Aberdeen, at the eastern angle of the Great Karoo, my host reckoned that upon his 62,000 morgen of land (130,000 odd acres) he had usually running some 4,000 head of springbuck. The run then

was quite unfenced, and the antelopes had free range over thousands of miles of country if they wished. Even from the farmstead stoep (veranda), as we sat in the mellow evenings, smoking our pipes after a warm day of work or sport, we could see the springbucks grazing peacefully within some six hundred yards of the dwelling. A truly charming spectacle, still more effective when seen, as it may still be seen, in Bushmanland and much further up country, with no sort of white man's dwelling but a tent or a wagon within a hundred miles.

Plenty of excellent springbuck shooting may be obtained in Cape Colony among the hospitable farmers of the Great Karoo and the districts further north. Many of the runs are, however, nowadays fenced with wire, and the essential wildness and freedom necessary to the lover of real and unadulterated African shooting is to some extent gone. Nevertheless the big hunts among the farmers on the Queen's birthday, when from fifty to seventy head of buck are often obtained by fair shooting, are well worth seeing. It is not every man, even among first-rate rifle-shots from Europe, who finds himself able to bring down these antelopes successfully in his first essays, the sun-blaze is so intense, the mirage often so troublesome, and the difficulty of judging distances amid new and trying surroundings so great. Add to these the fact that the springbuck of the more settled parts of Cape Colony nowadays seldom allows the gunner to approach within less than from three hundred and fifty to four hundred yards distance, and that its light body, mounted on tall, slender legs, offers but a small target, and the tyro will find that at first he wastes an inordinate number of cartridges.

The best sport to be obtained in Cape Colony is, of course, in the far northwest—the Bushmanland country—where the wonderful Trek-bokken, or migrations of these antelopes, still periodically occur. In these Trek-bokken tens of thousands of springbuck still migrate bodily in one vast moving mass from one part of the country to another, in search of fresh pastures. The Trek-Boers turn out and shoot them in scores and hundreds, and any fairly good rifle-shot can bag his forty or fifty head in a day. At these seasons the antelopes show little fear of mankind. In Bushmanland, once in a cycle of years, the springbucks, normally independent of water for long periods, are

attacked by raging thirst and trek for water. Not many years since, hundreds of thousands of them headed straight for the Atlantic, "dashed into the waves, drank the salt water, and died. Their bodies lay in one continuous pile along the shore for thirty miles, and the stench drove the Trek-Boers who were camped along the coast, far inland." This is fact and not fiction, related in the words of a magistrate of the district in which this extraordinary event happened.

Springbuck stalking is a most fascinating sport. It is, perhaps, best enjoyed by aid of a knowing old Cape stalking horse, behind which the gunner can creep down upon his game and obtain his shot. The wonderful leaping powers of this graceful antelope, from which it takes its name, are of course well known. When excited or at play, the animal arches its back, erects the curious fan-like blaze of long white hair which normally reposes along its croup, partly covered by the neighboring cinnamon-colored hair, and begins, as a Boer would say, to "pronk," or prank. Bounding clean up into the air from all four legs, which are very rigid, to a height of eight or ten feet, the pretty creature seems for a moment to hang suspended in mid-air. Then down it comes again, only to be propelled upwards in that marvelous flight as before. This may happen half a dozen times or more, and then away the fleet buck scours across the endless plain. Nothing in African wild life is more elegant, more wonderful, or more characteristic, especially if, as usually happens, a number of the antelopes are taking part.

But the sportsman may tire of the sun-scorched grass plains of Bushmanland or the parched, red-soiled karoo. He has no need, even in Cape Colony, to wander far. Does he desire mountain stalking amid some of the wildest and most rugged scenery to be found in Southern Africa? He has but to betake himself to some of the great mountain ranges of the southern parts of the Colony—the Zwartberg, or Witberg, or Winterhoek, or many another, where he will find really excellent sport with vaal (gray) and rooi (red) rhebok, or that most charming little mountaineer, the klipspringer, the chamois of Africa. In these haunts he will find himself often passing through deep kloofs and passes brilliant with some of the most lovely wild flowers imaginable—wonderful irises, gladioli, ixias, amaryllids, orchids, heliophilas, masses of

lovely pelargoniums, all sown by the hand of nature, often in the most lavish fashion. Many a wild hill among these vast solitudes, seldom traversed by the foot of man, sparkles with innumerable lovely heaths.

Turning to the more densely bushed country eastward from Port Elizabeth into the Transkei and Pondoland, excellent bushbuck shooting is to be obtained. Here, too, is to be found and shot that pigmy antelope, the blaauwbok, or bluebuck, a creature no bigger than a hare. The handsome grysbok, with its brilliant red coat curiously grizzled with white hairs, is to

be obtained on the lower hill-slopes in many parts of southern and especially of southwestern Cape Colony. Even within a few miles of Cape Town, numbers of these beautiful little antelopes are to be found ranging. Steinbok and duyker, two smallish antelopes, affording excellent shooting, are common in most parts of Cape Colony; but go where you will, armed with a few introductions you are certain to obtain—in time of peace—whether among Dutch or British farmers, a hearty welcome, much hospitality, and good sport with many kinds of antelope, in nearly every portion of the Cape settlements.*

JOHN BURROUGHS

By Clifton Johnson

AMONG the many letters received by Mr. Burroughs the naturalist, from correspondents who want to express their pleasure and interest in his works, was recently one from a schoolboy, who said: "I got one of your books through the mail, marked on the wrapper *second-class matter*. But it isn't second-class matter. I have read it, and it is first-class matter. The binding and the get-up may be second class, but the matter is first class."

The protest this boy was stirred to make, and his attempt to set things right, illustrates very forcibly the close relationship which Mr. Burroughs establishes with his readers. They feel that in his writings they are taken into his companionship and confidence, and they unconsciously become his friends. Few authors put so much of themselves into their books, yet there is never any flavor of pride or self-consciousness, and the personal incidents, thoughts, mishaps, and scraps of autobiography add much to the allurements of the narrative. His openness and genuineness are without a flaw, and his youthful, contagious enthusiasm is perennially renewed.

Few other nature-writers win the affection of readers to the same degree. In others there is either some reserve, or else the companionableness is not quite free from being acted and assumed. Charm is often present, but very little fire. They are more apt to make you contemplate nature as an on-looker than as a participant in its affairs. They do not enkindle the imagination as Burroughs does, or inspire the same love of the country, the woods, and of simple living; for John Burroughs is a prophet and a seer in his way—not an observer and reporter only. His is the voice of one crying in the wilderness, "Repent ye, of all this folly of city life, with its din and grime, its artificiality and pretension, and come out to the fields and forests and make friends with the wild flowers, and the little creatures of the air and earth. Have done with conventionalism, and show, and sham, and be content with the plainer things of life. Have all the comfort you choose, but avoid luxury as you would the plague; for you may gain the whole world and yet lose your own soul—not as a matter of theology, but in losing the sweetest and best possibilities in yourself."

*Of course it is necessary to remember the close times which obtain nowadays in Cape Colony, as in other parts of South Africa. Speaking generally, the shooting season at the Cape may be said to extend from the end of January or February to August or September. It varies in particular districts and in different years.

Some such message underlies everything John Burroughs writes, though it is not always definitely expressed. He would have you feel the pleasure that he feels in nature, and the delight in a quiet country life, and his words are inspired by his own warm love of these things, and an irresistible desire to declare his happiness in them, and to attract others to the same wholesome enjoyment.

contributions from him, that the things he is asked to do are just those which he does not want to do—at least just then. Money is small temptation to him, for his farm furnishes all requisite support, and he is not in pursuit of either riches or fame. Consequently, he is not a voluminous writer, and on an average a modest-sized book of his appears once in three years; a collection of



From a Photo by the Author.

JOHN BURROUGHS.

Burroughs is himself a thorough-going countryman. He makes his living by tilling the soil, rather than by literature. He never has been a slave of the pen, and has never written save when and how he pleased. He will say what he has to say, wholly untrammelled and unhurried, or not at all; and he acknowledges a streak of contrariness which makes him feel, when editors request

the essays he has written during the period preceding.

In these essays, nature is not the only theme. About one third of his work is concerned with other topics: literature, philosophy, and religion. Probably no finer appreciations of Emerson and Whitman have been written than his, and he has made valuable studies of Carlyle, Burns, Wordsworth, and

others in whom he has found inspiration. In religion he is constructive, or destructive, according to one's point of view—constructive in the evident sincerity with which he seeks to separate truth from error, destructive in that he has no reverence for creeds or dogmas, or assumptions based on the traditional acceptance of them. He discusses various aspects of these subjects in his recent book "The Light of Day," with a clearness of statement and a keenness of argument seldom equaled.

Lucidity and expressiveness are characteristic of whatever he writes. He has an easy flow of language and an imagination that brightens his pages with many piquant and unexpected touches. Shades of meaning are admirably caught, and the twinkling humor, and the raciness, and the cheerful good temper of it all, are infectious. He broadens one's horizon in a direction replete with healthful pleasure-giving. Mr. Burroughs is now past three score years old, but has lost nothing of his youthfulness. His mind is as alert as ever for things unseen before, and he has a wholly unaffected enjoyment in every new discovery he makes in the world of nature.

He is not a scientific observer, neither will he jump at conclusions. He gathers his facts sympathetically rather than by toilsome investigation. That is, the birds and other wild creatures—and I might add, the domestic farm animals—are to him in the category of fellow-humans, with cares and sorrows and joys not unlike his own. Their songs and cries are, in his mind, translated into words, and express sentiments and feelings in wonderful variety. A bird's escape from danger, its success in driving off marauders and rearing a brood, are a real happiness to him, and a disaster among his feathered friends distresses him hardly less than it does the birds most concerned. Even the birds' prejudices are respected; as, for instance, in the case of a robin which last season built its nest beneath the roof of a little open summer-house, where it was Mr. Burroughs' custom to sit in the afternoons. The robin took a dislike to him, owing to a cat which sometimes was his companion, and our nature-lover's presence made the deluded bird cry and flutter about in much perturbation. Accordingly, Mr. Burroughs gave up the summer-house to the bird, and carried his chair to the shadow of his rustic

study not far away, where he made that his afternoon sitting-place until the robin had raised its family and flown away with them.

Mr. Burroughs, as a farmer, has leisure for the companionship of the wild life which he chronicles, because he farms with his brains more than with his hands. Rural loitering is his recreation, and there seldom is a time when he cannot stop, if aught attracts his attention, to listen, or watch, as long as he chooses. "Riverby," his home on the Hudson, is excellently situated for a person with his tastes. The valley is a natural highway of birds in their migrations north and south, and brings to his door the feathered folk of many latitudes. The immediate surroundings are purely agricultural, yet a little back from the river the land lifts into rugged hills, quite primitive in their wild forest growths, and studded and laced with secluded ponds and streams. His favorite writing place is either the quiet of a bark-covered study overlooking the river, or a rustic hermitage which he has built for himself back in the woods, and dubbed "Slabsides," from a peculiarity of its construction. Autumn and winter are his chosen periods for writing, and spring and summer his time of relaxation and absorption.

In the Hudson Valley and in the Catskills, his boyhood region, he has found nearly all the material for his nature essays. The plain farmhouse where he was born yet stands—far up among the mountainous highlands—a lonely house, with a big gray barn across the road, and the nearest neighbor half a mile distant. Burroughs knew there all the work and fun that fell to the lot of old-fashioned country boys in the days of the spinning-wheel and the open fireplace. He left the farm when he reached man's stature, to teach school, and later he became a government clerk in Washington. Later still, he was appointed a bank inspector; but he was essentially a man of the soil, to whom routine labor, and business turmoil, and a city environment were entirely foreign; and he at length returned to his own. As a farmer and country dweller he will live out his days. The tenor of his life changes little from year to year, his affections remain steadfast, and this hardy gray poet of things rural will continue, as ever, the warm-hearted nature enthusiast, and inspirer of the love of nature in others.

THE SPORTSMAN'S VIEW-POINT

By Caspar Whitney

Many
Kinds
of
"Amateurs."

If, by chance, has come your way, the mundane experience needful in the metamorphosis from tadpole to philosopher, you will find the world very amusing; and nothing in it more so than the studied ingenuousness which would have you take seriously all its professions. It is difficult to judge whether we creatures of human clay are lacking mostly in sense or in principle. Frequently it happens, that we are puzzled to decide if a given man is just a plain d— f— or dishonest.

Perhaps no subject has endured such distortion by these two types of moral vagrants, as the one concerning the ethical status of the amateur in sport. A cult has developed that appears to believe an amateur what it may be pleased to make him; and as the judgment of this cult follows its material interests, the amateur is invariably made into a professional. As a result, there are very nearly as many different kinds of amateurs as there are forms of sport, and no legislation on the question that is universally respected.

In rowing, in practically all games, indoors and out, and in the general field of athletics, the status of an amateur is clearly defined, and accepted without question wherever such games obtain. This has been made possible through organization and the affiliation of national and international bodies conducted for the welfare of honest, wholesome sport. But so soon as we get beyond the sports thus guarded and nourished, we find invariable confusion and almost as invariable corruption.

Amateurs
and
"Amateurs."
The conditions are as various as they are inconsistent with the first principles of amateur sport. In trap shooting, for example, the "amateur" may not give exhibitions on grounds where gate money is charged, or be in the employ of a gun, pow-

der, or shell manufacturer, for the purpose of exploiting the wares of such manufacturer; and even these forbearing restrictions are suspended for the great event of the year—the Grand American Handicap—which is open to all classes. But the "amateur" may shoot for a money prize against professional or other, or for a wager, or under an assumed name; he may, in a word, actually support himself by his skill at the traps.

In road driving and matinee racing, an amateur is prohibited from driving or training horses for hire, or driving against a professional; but he may race for cash to his heart's content, and, if he is sufficiently successful, support himself and stables on his winnings.

In yachting, the status of an amateur has never been clearly defined by the large clubs—the New York, Seawanhaka-Corinthian, Larchmont—the best effort at a definition being that made by the Seawanhaka; but it shows no sympathy with the only vital point. The spirit of this rule asserts an amateur is one who does not make his living out of sailing boats; he may be a designer or a builder, but not a workman in a yard, working on a boat, or on the making of the boat's sails. This is a ridiculously inconsistent rule; why a designer should be judged an amateur, while the sail cutter in the loft is declared a professional, I confess myself unable to see. Each makes his living out of boats. But the amateur may also race for cash prizes, under the rules of the large yacht clubs—though among those clubs devoted to small boats, and in the Inland Lake Association, racing for money is forbidden to amateurs. Such a rule, and one that an amateur may not accept remuneration for services on board, are the two most needed to safeguard the amateur status of this sport.

In the old days of New York and Manhattan Athletic Club boxing, it was customary for the "amateur" combatants to slug for medals upstairs in the gymnasium, while

downstairs a certain amount of "long green" found its way into the inside pocket of the winner. This gentry used to call themselves "amachoores," and the title has since then, not inappropriately, I think, fallen upon those whose active interest in sport appears to require the stimulus of "long green."

**Jingle
of the
Shilling.**

What is an amateur? one who does not make his living by the sport? Surely; but there are men who do not really make their living through a sport, who are yet professionals in the sense of being in the game for what there is to be made out of it. There you have the distinction—in the game for what there is to be made out of it. Since the dawn of modern sporting ethics, the jingle of the shilling has distinguished the professional from the amateur. It may be the veritable shilling; it may be a purse of hundreds of dollars; it may be as a means of livelihood; it may be by way of making the contest more "worth while;" the principle remains the same. There are no degrees of amateurism any more than there are degrees of honesty. A man is honest, or he is dishonest; he is, in sport, an amateur, or he is a professional. And this broad principle applies to all forms of sport, as it does to all branches of human endeavor. It has the same significance in banking as in dry goods trade; the same in football as in yachting.

We need, sorely, universal recognition of this principle in sport; it will never be possible to keep any game wholesome and prosperous unless competition for money is the fundamental line separating the amateur from the professional.

**Motor
Road
Racing.** Motor road racing with large cars, using from twenty to fifty horse power, is, I observe, attracting less and less attention.

This seems both desirable and natural. In the first place, a dust-enshrouded vehicle, tearing along a public highway at the rate of thirty miles an hour, is dangerous and undesirable in any community; in the second place, such machines are very expensive; too expensive for any but the extremely wealthy. Thus for two excellent and all-sufficient reasons this kind of motor racing is destined to short life. Here in America we have neither the roads nor the patience to permit of it; in England the

people have better roads and more patience; yet the speeding motor car is marked for banishment. Even in France, the home of this earthly flyer, opinion is setting against high speeding. Of course, with the prohibition of high speeding, the day of this machine will pass. And even if unforbidden, there must come an end to this kind of racing before long. The game will kill itself, through increase of the motor in the struggle for greater pace. The real interest of people is centered upon the medium-sized automobile, and, the fate of the high-speed car is viewed with indifference.

**Automobile
Possibilities.** The automobile, in reality, is just at the beginning of its development, and the next few years will unquestionably revolutionize many present-day methods of transportation. Already a machine has been made in France, on Russian order, especially designed for traveling over ice and through and over snow; other designs are making for mud roads; and there is much activity in models for army use. Apropos of which, Col. R. E. B. Crompton, of the British Electrical Engineers, who went to South Africa for the purpose of looking into the practicability of the automobile in genuine service afield, recently declared in public, that the lesson of the war as regards automobilism was unmistakable and striking. Not only in matter of speed and durability, but with relation to the health of the army. "The greatest scourge of the army in South Africa," says Col. Crompton, "was enteric fever, caused by the enormous number of dead animals. The loss of animal life was inseparable from the present system of transport in war, and could be largely avoided by the use of traction engines."

France, Germany and Italy have introduced the automobile in army manœuvres, and in some recent Italian tests, the automobiles performed very successfully over rough ground "interspersed with ditches and dotted over with bushes." England has for some time been using traction engines, but the United States is hardly yet alive to the possibilities of the automobile for military purposes.

It is a curious fact, but a fact none the less, that we are a very conservative people—not to say slow—from a Continental view-point, in the matter of adopting anything new. Witness the bicycle and the automobile. Once converted, however, and

we distance the field. Here we are now, for example, only in the infancy of automobile manufacture; yet at the present day more vehicles are being turned out, in the day or the week, in America than elsewhere.

The West a Factor in Golf. It is unfortunate that the President of the National Golf Association must be a working rather than a figurehead, else might we have one chosen from out of the great West. But the fact of the matter is that the center of golfing activity has not yet moved west of the Atlantic Coast, and as there is much call upon both the president and the secretary, it seems absolutely necessary that those two officials be residents of the East. In a word, both must work, and naturally the great bulk of that work is where the population of golfers is densest. It is too bad this is so, but it is, and no doubt will be for several years to come. In my judgment, the middle West, if in a golfing sense we include from the Alleghanies to the Rockies, is a section which must very shortly make itself felt in the golfing world. At all events it is a region which should have the official attention of the Association in the matter of encouraging sectional championships. There is not the smallest reason why sections should not be clearly defined and championship tournaments annually held; but unless the national body gives the matter encouragement and its official recognition, the movement will lag.

And it will be wise for the Executive Committee to give the West heed, for one day it is to be a powerful factor in American golf and its fealty can only be assured through now administering to its needs with consideration and sportsmanliness.

The Association Presidency. Were Western golfing affairs now of sufficient consequence to warrant it, I should like to see a Western man succeed Mr. W. B. Thomas, who, I regret, will not serve again; and in that case none would be worthier than Mr. Hobart Chatfield-Taylor. But it may not be for two or three years yet. An Eastern man being therefore necessary, a choice is not so easily made where there are many amply qualified. Mr. R. H. Thomas, Mr. H. B. Hollins, and Mr. Samuel L. Parrish are among those who are being considered by the Nominating Committee, and all are worthy and desirable candi-

dates. Mr. Thomas has shown his executive ability in the Morristown club, and would be in every way satisfactory but for the fact that he is serving his first term as President of the Racquet and Tennis Club, which, in its present period of expansion will make, I should say, great demands on his time and thought. Mr. Hollins was an excellent president of the Metropolitan Association for two years, and seems to me naturally in line for the vacant presidency of the national body, though this is not written to the prejudice of the others. Yet I confess to believing him the strongest national candidate, whether or no the Nominating Committee—Messrs. John Reid, C. B. Macdonald, O. W. Bird and R. E. Griscom—offer him the honor.

At all events, let it be borne in mind by whoever becomes president, that he should keep his eye on the West and an ear sympathetically attuned to its needs.

Ranking for Golfers. Among the desirable innovations which the Golf Association can make is the appointment of a Committee for the purpose of officially ranking the golfers, as is done by the National Lawn Tennis Association. Peace may forever after depart from the lives of the committee; but self-sacrifice is a noble attribute, and especially seemly in the golfer as atonement for those "few remarks" made on the occasion of a foozled drive. Seriously, an official annual ranking would, I think, have rather a salutary influence on the game, giving incentive for recognition to a long list of second raters, and supplying a stimulus to consistent play among the leading half dozen or so.

But, perhaps, the best influence of this ranking would be in hastening organization on geographical lines, so that the series of sectional championships would be complete and dependable. Some of the sectional champions would, no doubt, enter the Association championship, and could be considered in the national ranking. Perhaps this might lead, too, to a solution of that vexing problem as to the restriction of entries for Association championship. Once get the sectional organization scheme under way, and it will go on by its own motive power, and settle many troublous questions, I have no doubt.

On their work in 1900 it is easy to place the first three men—Walter J. Travis (champion), Findlay S. Douglas and R. C. Watson,

Jr.; but the others come somewhat bunched—Herbert M. Harriman, A. G. Lockwood, C. M. Hamilton, John Reid, Jr.; Charles Hitchcock, Jr.; H. B. Hollins, Jr.; C. H. Seeley, E. M. Byers, Allan Kennady, T. M. Robertson, John Stuart, J. G. Averill, Percy Pyne, second; A. D. Cochrane, William Waller, Thompson (Chicago) and Wm. McCawley. I make no attempt to place these precisely in the order to which their season's work entitles them; the above order is merely suggestive. Had I thought of it earlier, I should have given it more attention, and compiled a strictly accurate rating; for the subject appears an interesting one. I commend the idea to the Association at its February meeting.

So, too, with the women, there might be a classification, if not a ranking. Those of 1900 whose work was most prominent are: Miss Frances Griscom (champion), Miss Margaret Curtis, Miss Beatrix Hoyt, Miss Terry, Miss Genevieve Hecker, Mrs. A. D. Cochrane, Mrs. E. H. Manice, Miss Bessie Howe, Miss Grace B. Keyes, Miss Bessie C. Anthony, Mrs. Charles S. Brown, Mrs. William Shippen, Miss Ruth Underhill, Mrs. Fellows Morgan, Miss Elsa Hurlburt and Miss Maud K. Wetmore.

Improved Southern Links. The present winter season has shown great improvement of the playing courses in the South, where now a golf links, and especially in Florida, appears to have become a resort necessity. It is pleasing to note, too, that a more wholesome conception of the game's ethics seems also to have spread. The allurements so commonly offered to golfers of the first class, in an attempt to induce their attendance, are now the exception rather than the rule. Prizes have become more modest, and there is a very general valuation of the game as a game, rather than as a means of advertisement.

Lawn Tennis Rule Changes. There has long been need for changing the rules governing foot faults and the periods allowed for rests between sets, and it is to be hoped that the Association, at its forthcoming annual meeting, will accept the excellent suggestions made by its president, Dr. James Dwight. The present allowance of seven minutes' rest, after the second and every succeeding set, is excessive, and, as Dr. Dwight says, one

period, after say the third set, ought to be ample for the match.

I think we are apt to carry the resting to extreme in this country, and without need. There is the same trouble in racquets. We would do well in this respect to conform to English regulations.

While the Association is revising its rules, it will be serving the game further if something is done to banish the miserable nets and posts one sees employed so frequently in tournaments. The nets are not the best, nor yet the worst; but the posts are wretched, often being of that antiquated pattern—a slender stick held up by guy ropes. No club should be considered entitled to hold an open tournament, unless it had solid posts set firmly in the ground, as at Newport. Also a proper net rigging should be insisted upon, so that the net may be kept at the proper height, and not sagged in center.

Then, too, why can there not be an agreement between the English and American Associations, as to a standard ball? The English ball is larger, heavier and firmer. Mr. Clarence Hobart says it is unquestionably superior to the one we use.

Considering that practically every year Englishmen are playing on American courts, or Americans playing on the other side, it would seem common sense for both to use the same (and the best), especially as this is one of the very few games in which international competition is a possibility.

There is already talk, by the way, of another English team coming over this season.

High-Class Brood Mares Scarce. The frantic scramble after the almighty dollar, with no thought beyond its immediate possession, is exerting an extremely harmful influence on race-horse breeding. Every one wants to race horses because of the gambling element, and the chance for immediate and handsome returns, but few men are being added to the ranks of the breeders. Naturally, the money making hysteria has touched the breeders also. They catch the spirit of the quickly made article. No one has time to await normal development. It is the age of the incubator. The sentiment, which once upon a time hovered about the breeding of race horses, has gone, alas! it is all dollars and cents now, and every one wants speedy and abundant returns.

On the race track it is the day of the

youngster; the richest purses are given him, nor is any task too great to ask of him. The breeder, thinking not of the morrow, knows therefore that his quickest returns come from forcing his colts. He has no time, in the mad rush for money, to develop and breed them; he is selling the best off as rapidly as possible, and retaining the poorest for breeding.

This is all very well for the present, perhaps; but how about the future? Where are the brood mares to come from, and how is the present quality to be sustained? In running stock the immediate outlook is not so disquieting; although there can be no doubt that the forcing of colts and the tremendous campaigns to which two-year-olds are submitted, is having its effect on the stamina of the thoroughbred.

But in trotters and pacers the trouble is a present one; breeding is practically at a standstill, and yet there never was a time when the rewards of the really good breeder were greater. There is an unprecedented scarcity of brood mares, and the situation will become serious indeed if a halt is not made in the wholesale disposal of youngsters. The breeder who takes advantage of present conditions and secures a stud of really high-class mares, will be both wise and rich in his generation.

**Modern
Race Horse
a
Degenerate.**

Apropos of what I have written about the modern craze for running two-year-olds, it is encouraging to know that no less an authority than Dr. Thomas Oliver, of the Newcastle College of Medicine, London, has recently discussed the question at some length, after long and closest investigation. And what Dr. Oliver has to say is authoritative. He asserts unhesitatingly, upon the conclusion of his research, that horses are run too young; that their career lasts but two years, and is at an end when they are four years of age. In other words they are old and retired race horses, while yet in practical colthood. Modern racing is all sprinting, and Dr. Oliver is very severe in his condemnation of this in both man and horse; his argument is very strong to show that the greater delicacy of constitution and the diminished staying power of the race horse of to-day is directly traced

to running horses so hard at such tender years, to sprinting, and to too close inbreeding. The modern race horse is lacking in stamina, as compared with his forefathers; in a word, he is a degenerate.

Dr. Oliver also gives some very interesting and instructive facts concerning the comparative racing qualities of mares and horses. He claims that at two years the mare is the better race "horse," but that she deteriorates more quickly and at three years is inferior to the horse. By way of illustration he shows that in the 120 years of the Derby, which is open to both sexes, only three mares have won the event, viz.: Eleanor in 1801, Blink Bonnie in 1857, and Shotover in 1882. But the Derby is run in May when mares are not at their best, therefore Dr. Oliver makes his conclusions more convincing by citing the results of the St. Leger, which is run in September, when mares are fittest. In the 104 times the St. Leger has been run since its establishment in 1776, a mare has won 23 times.

All of which is very interesting and tends to revise the popular dogma that the "best mares are the best horses."

**Jockey
Sloan
Properly
Censured.**

There is no doubt that the English Jockey Club's decision not to grant Tod Sloan a license for 1901, is well within its right and the merits of the case. And the Club's course in this case, as well as in that of Lester Reiff, whom it exonerated of the charge of dishonest riding, proves it to have a more certain and unprejudiced conception of English racing conditions than Lord Durham's recent hysterical outburst showed him to have. Sloan has been a repeated and swaggering offender in the matter of betting—which, no one for a moment questions, is the most serious and most corrupting ill of the race course—and he richly deserves the rebuke he has received. American sportsmen are united in the hope that the American Jockey Club will respect the English Club's ruling; it would be a sad reflection upon the ethical status of our sport, if any club in this country should permit Sloan to ride upon its tracks until 1902, when, no doubt, if meantime he has behaved himself, the English Club will withdraw its ban.

There is need of some vigorous handling of these successful jockeys, else will they

ride rough shod over all the decent traditions of the sport. The swindling, dishonest element that crowds the race course has reached a condition of opulence and aggression where it is well nigh to overwhelming us; and the remaining respectable element must assert itself in no indecisive way—or be swept off the face of the turf.

We want more aggression in our Jockey Club; more real understanding of the perils which beset the game on every side; and we want decidedly more fearlessness on the part of the racing stewards.

England's trial in 1900 was a sore one; for in addition to contending with her own rascally turf element, she was beset also by a tide of the same vicious class from America. It was well to make an example of so illustrious an offender as Sloan.

A Good Beginning at Yale.

We are promised reform at Yale in the matter of rules governing eligibility to her teams, etc., and an excellent beginning has just been made in the official announcement that hereafter no athletic organization of students may use the name of the University without permission. That Yale has at last put a stop to the loaning of her name to all manner of student athletic teams must be gratifying news to *alumni*. Hardly a year has passed in the last ten which has not recorded nondescript combinations junketing about the country as "Yale Consolidated" teams of one sport or another—chiefly, however, of baseball and football.

And now let the good work at New Haven progress; there is a great lot more requiring attention before spring is upon us, stirring track athletics and baseball into activity. There are unequivocal rulings to be made: (1) touching the playing by students on hotel, resort, or so-called "summer nines," where money is taken in at the gate, and some or all of the players are paid for their services in cash or in board; (2) concerning the eligibility of students who, during vacation or other time, have been boarded by athletic clubs in return for athletic service; (3) as to ineffective university regulations which now permit a student who is not up and cannot keep up with his classes to become a member of a 'varsity team, despite the professed and published faculty mandate that an athlete must attain a certain given

scholarship standard to be eligible for any team; (4) as to men who have returned for "graduate work" being practically without scholarship restriction while playing on an athletic team; (5) concerning men who return after a year's absence and are eligible to teams without a preliminary residence period.

These are all matters which have received fitting attention at the majority of the leading universities, but that are urgently in need of adjustment at Yale.

With repeated illustrations of inefficient management and extravagant use of money, it is somewhat remarkable that a larger number of faculties do not concern themselves with this very important end of college athletics. Boys not out of their teens are left to handle large sums of money; to make important and expensive business contracts and to conduct wholly the finances of games, which, like football for example, earn thousands of dollars. And when bad contracts are made, or extravagance rules in the disbursement of money, the faculty meets at the close of the season, and after much wise looking and some scolding, condemns the undergraduate management—and goes its way in prideful confidence of having done its full duty.

It would be a waste of my time and of your patience, my reader, were I to attempt argument here; the facts speak for themselves and the remedy is so patent as to be obvious to even the average American father—who beyond all mortals seems the most indifferent to what his boy does at school or college, or how he does it. The fathers ought to be the real power behind the faculties; and yet, when the average father has shipped his boy off to college, he appears to give up all concern of him, save for an occasional inspection of the allowance account in the belief that it constitutes a trustworthy gauge of the boy's conduct.

At several of the larger universities the need of competent and more mature supervision of the business side of athletics, is realized, and graduate managers and treasurers appointed. Needless to say that such should be the rule at every college, and that in every case the officers should be directly responsible to the faculty.

Extravagant College Athletic Management.

Improving College Rules. Because her faculty and her graduates neglected her for so long a period, Columbia has had a severe ordeal during the last two years, both in the abuse of the ethics of amateur sport and in the rather extravagant use of her athletic earnings. But she appears now likely to come through creditably and with an experience which should be of inestimable service in guiding her future. Last season she showed immeasurable improvement in the ethics and general conduct of her football squad, and just recently faculty revision of her rules suggests that Columbia will maintain an amateur standard at all costs. That this is the only way in which permanent prosperity can be attained, all those of experience in the work know full well.

The publication of Columbia's new rules prompts the thought, however, of to what intricate elaboration of rule making have we come. And the more the pity when we consider that really three simple rules honestly enforced and truly respected, are ample for the wholesome guidance of college sport, viz.: (1) that the athlete be an amateur; (2) that he maintain a given scholarship standard, and (3) that a year's residence be exacted of one coming from another college before he be eligible.

The scholarship standard should be interpreted to apply some provision for the men entering professional schools without examination. In many colleges now, such a man may easily enter, play on the football team all season, and leave immediately thereafter, without having been under any scholarship restriction whatever. This is especially true in the South, and has been taken full advantage of. Columbia's faculty should effectually block this avenue of athletic student escape.

Actions Speak Louder Than Words. The respective faculties of Leland Stanford and of Columbia Universities are to be commended for the evidence they have recently given of a true conception of what sport should be. Leland Stanford "dropped" a number of prominent athletes who had been very remiss in their classes; and Columbia suspended from athletics for a year, its entire hockey team, which had gone on a playing trip disregarding faculty wishes.

This is the kind of action that puts sport where it belongs. So often reform begins

and ends in faculty promise that actual action is very gratifying. As for the athletes—university sport can well do without such kind.

Graduate Coaching System. Cornell has put forth a simpler but equally effective code of rules during the season just passed, showing that she, too, profited by the experiences of a couple of years back. To all colleges revising their rules I commend those suggested by the Providence conference, which, without being too elaborate, yet touch upon the vital abuses in college sport. But the wisest step Cornell has taken is that towards the establishment of a system of graduate coaches in football; it should have gone farther and done likewise in baseball, and also in rowing, under the direction of Courtney. Those who follow college athletics at all closely and with intelligence, long ago concluded that the graduate system is the only one which gives a college permanent position in any given game; it is the only one which insures a wholesome and natural development. I am aware that some of you will combat this statement on first reading, but study the college athletic horizon of the last ten years, or if your horizon is too limited, look up the question, and then see how near to facts I am in making such an assertion.

A graduate system of coaching is not always, is infrequently indeed, possible at the smaller colleges, and here reliance must be placed upon the best obtainable. But in such cases it will be a wise little college which clings to one school of play, always provided it has chosen advisedly at the beginning. To employ a coach this year graduated from the Yale school, and next year one from Harvard, followed by one from Princeton or Pennsylvania the year following, is the poorest system any college can employ. Sticking to one school is every year bringing nearer the possibility of one day establishing a graduate system.

I commend this thought to the consideration of the large middle Western universities, Chicago, Michigan, Wisconsin and Minnesota, where, despite the length of time they have been playing football, and the excellence and quantity of material, no one has successfully maintained a graduate coaching system. None has even made a serious effort save Michigan, which because of a poor season, weakly aban-

done it for employed coaches and has really done worse. Chicago and Wisconsin have followed different schools, one Yale and the other Princeton, and each has been wise in adhering to a single system. Both are in excellent position to found graduate coaching and should do so without loss of time, while their present coaches are available. Minnesota has really only begun football on the right basis this year, and should continue along the lines which brought her eleven such distinguished success last autumn.

Some comment I made in the December number on Wisconsin and Mr. J. P. Riorden, who played guard on the 'varsity eleven, has, I learn, been interpreted by several Western journals as intimating professionalism on the part of Mr. Riorden. It is only for the latter's sake that I refer to the matter, although I must express surprise at my words being so misinterpreted. I think my readers will bear witness that I am not given to "intimating." I usually write rather plainly and frankly what I have to say. Reference to the December issue will show that my theme was "the madness for winning;" a commentary on the lax enforcement of rules at some colleges and absence of needed ones at others. Wisconsin was cited as having no rule to prevent the playing on her team of Riorden, who had graduated in '98. The criticism, and criticism was certainly intended, was directed at Wisconsin and not at Mr. Riorden, of whose student *bona fides* I was well informed. The fact that Wisconsin has no rule preventing such return is no reason why she should be spared criticism; such a rule is required to keep the spirit of college sport from being violated; for we cannot be assured that all football players taking advantage of its absence will be of the Riorden standard.

Princeton and Pennsylvania. If the failure of Harvard and Princeton to agree upon baseball dates is to be the means of re-opening athletic relations between Princeton and Pennsylvania, I shall view Harvard's arbitrary attitude on the baseball series question as one of the best things she has done for college sport in a long while. It is high time, indeed, that Princeton and

Pennsylvania buried the past so deep that it can never be resurrected, and came together in baseball and football. Both need the healthy stimulus of such meetings and each can learn from the other. Football games between Yale and Pennsylvania appear about as remote as they did three years ago; having Harvard and Princeton dates it would of course be utterly impossible for Yale to consider a game with Pennsylvania. In baseball, however, there is no reason, beyond the clinging prejudice of some graduates, why Yale and Pennsylvania should not meet.

In the financial and eligibility rule-making departments of college athletics, I believe in the domination of faculty or *alumni*; but when it comes to deciding with whom the undergraduate teams shall play, it seems to me that is a matter entirely for the decision of the undergraduates themselves.

I do not believe in leagues, or in agreements for extended series in any branch of sport, but I am an earnest advocate of athletic meetings under equalizing rules between colleges, which, because of traditional, geographical or other good reasons, are natural rivals. Hence I am strongly in favor of a resumption of Princeton and Pennsylvania athletic relations.

Hoodlum Hockey. The rowdy spirit which all last winter ruled in hockey, seems not to have been broken. Unless it is quelled, this excellent game will fall into such disgrace that desirable spectators will not attend the rinks. Rowdy play is not only disgusting spectators, but retarding the skilful development of the game.

In the two games played in New York, by the Victoria team of Montreal, there was so much roughing as to well nigh destroy interest in the match; Victoria beat the New York A. C. team 8 goals to 5, but the following night was beaten 2 goals to 1 by an All New York team, the defeat unquestionably being accounted for by the visitors losing their captain (whose foot was badly cut) in the first half. The substitute was not up to the speed of his captain and the team played thereafter under a severe handicap. The Canadians play a much faster, cleverer team game than the New Yorkers, and keep within the rules better.

Authority Without Power. It is most unfortunate that with so excellent an instrument for the protection of game as the Lacy Act, there should be any restriction in its proper usage. But, in point of fact, not half the strength of the Act may be utilized. The Lacy law is in the hands of the Agricultural Department, and as there are no Federal game inspectors or wardens, there are no agents to see that the law is enforced. Not only is the Department of Agriculture in no position, being without agents, to enforce the law, but it must await the pleasure of Congress until an appropriation is made. And we all know what waiting on Congress means. The least that can be done in the present emergency is to make a United States deputy of every State game warden in the country. Only by so doing may benefit be reaped from this splendid law.

Meantime, while we await Congressional action, it is fitting to discuss the appointment of a national or Federal Game Protector, after the manner of the Chief Forester, which office Mr. Gifford Pinchot fills so creditably. Why should not such an office be created? Surely there is need of it. Furthermore, it seems to me that matters of game protection, forestry preservation and road building, are national subjects, and while the Constitution vests control of these matters in the State legislature, yet the Lacy Act shows that Federal co-operation can be, if properly exercised, of immeasurable value. If there was a national game protector of such ability and activity as our Chief Forester, his influence and authority would bring about many corrections for which we now beseech legislature after legislature in vain.

Uniform Game Laws. Perhaps the very best act a Federal Game Protector could accomplish, and he could do so without doubt, would be the institution of uniform game laws throughout this country and between the United States and Canada. Those who do not study these questions carefully have no idea what havoc, in bird life particularly, is now made possible by conflicting State game laws. To almost an equally disastrous extent the same is true in respect to fish. No petition seems sufficiently long enough or strong enough

to reach the average State legislature. Not even the severe lessons which England has been recently receiving, because of inadequate protection of her fish, appear to make any impression on the legislator; not enough of them, I fear, know what is happening outside of their own county.

An international meeting of game club representatives was held not long ago at Montreal, seeking some means by which uniform laws may be secured—and at least continual agitation of the question is helpful—but really it seems as though only by Federal aid can the desired end be attained. Let us pray that the end of the game birds and fish does not come first. Unless something to restrict excessive pound netting is not done speedily the end of our fisheries will come before we realize it; the extermination of our food fishes is at present proceeding with rapidity from off our Jersey coast to Alaska, where the destruction of salmon is so wanton as to create amazement at its toleration.

If ever there were a people that needed reverses, disastrous and quick-following, to bring them to their senses—we Americans are that people.

Possession in Close Season. The most frequent and practical demonstration of the harmful results of non-uniform game laws, is the confliction of legal opinion as to possession of game in close season. Every now and again the question is tested in Court. Where it happens that the judge is an educated man, and in sympathy with the protection of wild bird and animal and fish life, the spirit of the law is interpreted as it was intended to be. But where the judge is of the brand that sees not beyond his political horizon, and has neither sympathy nor understanding, the dealer defendant usually escapes penalty. Worse—he is encouraged to keep on securing birds in close season—and so also are other dealers who read of the decision.

Dealers arrested for having game or fish in possession during close season, set up the plea that it was brought from another given State and legitimately killed in open season. Such a plea would not for an instant be tenable, of course, were the game laws uniform and close season restrictions made to apply to imported game. The present confliction practically stultifies the protective laws. So long as a

dealer can sell game pet hunters will supply him, not necessarily from another State, but from his own State, and during the illegal season for shooting. Allowing game to be in possession or sold during close season is attacking the very vitals of game protection.

New Yorkers have no occasion to be proud of the aid game protection receives at the hands of its various State courts. From the court of the magistrate to the State Court of Appeals, there appears to be a singular lack of sympathy with game protection. Recently the Court of Appeals decided in favor of the Buffalo Fish Company, which had been found with fish in its possession in close season. The company claimed the fish had been killed in Canada, and the court decided in its favor, in absolute conflict with the decision in the Phelps-Racey case, which some time ago was accepted by the Supreme Court of the United States as a precedent. If the law of this New York Court of Appeals were good law (as will be proved eventually, in this case, it is not), then all the provisions and laws for close seasons would amount to naught. But this only goes to show how much in need of uniform laws is the cause of game protection.

Yet even against such odds, the cause is winning its way, and its friends fighting the good fight all over the country. Only the other day, the Cuvier Club of Cincinnati, the champion of game protection in that section, made a large seizure of quail (possessed during close season), and succeeded in having the local cold storage company and several dealers fined to the full extent of the law.

**Better
Public
Sentiment.** Notwithstanding all the difficulties that beset the path of those seeking wise game laws, and the obstacles encountered in the

course of their enforcement, it must be admitted that public sentiment has undergone a great and pleasing change within the last half dozen years. Protection of wild bird and animal life used to be considered as the work of sentimentalists or sportsmen who wished to increase their opportunities for shooting. But that idea prevails no longer in intelligent communities. Broad-minded citizens of every walk in life have come to realize the great economic value of game protection—and along with this conviction has

come, too, a strong revulsion against the killing of all song and insectivorous birds. Among sportsmen there is strong disapproval of the hunter or angler who gauges his sport by the size of the kill; to be a game butcher is to be disgraced in the eyes of all sportsmen; the merciful sportsman is the best sportsman.

Another direction in which public sentiment is accomplishing great good is in spring duck shooting. At the recent international congress of the North American Fish and Game Protective Association, a resolution was adopted favoring the abolition of spring shooting, and severely condemning any one indulging in it, whether legally or illegally.

**Playing the
Wrong
Game.** If, as it is said by those reported to have seen the designs, Mr. Crowninshield has taken, as far as he knows it, the model of *Columbia* as a working basis for the Boston Cup Defender, yachtsmen will be disappointed. Not that *Columbia* is an unworthy racing machine model; but we were looking, certainly hoping, for something original in Mr. Lawson's boat; at least some departure from the Herreshoff lines, which are well known—and well tried, to be sure. Rumor is always busy in an *America's Cup* year, and not always to be depended upon; perhaps after all, Mr. Crowninshield may give us a surprise. Certainly he will not if the hopes of the Boston boat are to hang upon his turning out an improved *Columbia*.

And this is not saying Mr. Crowninshield can not turn out an improved *Columbia*; but it is saying that an improved *Columbia* will not be good enough to win the preliminary races. To play Mr. Herreshoff at his own game is, for any other designer, to court defeat. If this is the game Mr. Crowninshield proposes he is playing the wrong one.

Among other reports concerning the Lawson boat (and, by the way, we really wish Mr. Lawson would discontinue his press bureau; we should much prefer to do our own searching), is one that she will have greater breadth than *Columbia*, and carry 14,000 square feet of canvas, which is 700 feet more than the last defender carried. She will also employ gun metal for the foot of her keel, instead of bronze. The overhangs of the Boston boat are to be long and low, so that but a slight angle

of heel will materially increase her water line. Mr. Lawson has definitely engaged the veteran Hank Haff as sailing master, who in his day was unequalled, but it is doubtful if he can now hold his own with some of the younger captains; and this is said with all due respect for his past service in defense of the *America's* Cup.

Meantime work is going forward on the New York syndicate defender at the Herreshoff shops. And rumor is busy here, too, despite the secrecy maintained by the builders. It is said the new boat will be broader than *Columbia* by at least one foot, which means she will have a beam of at least 25 feet 4 inches. The new boat's lead keel is powerful and massive, and shows a concentration of the big bulb farther forward than was the case on *Columbia*; so much more forward as to suggest greatly increased sail carrying power. Everything one hears of the new boat indicates power. It seems incredible that *Columbia* can be outbuilt, yet undoubtedly the Herreshoffs will do so by from five to ten minutes over a thirty-mile triangle.

Centerboard Talk. Boston is threatened with a second aspirant for Cup defense, if the requisite capital, \$25,000, to build Designer Hanley's sloop is forthcoming. Mr. Hanley's suggestion is a 90-foot sloop with a 40-foot beam. She is to be built of wood, not leaded (which her sponsor says is equal for all practical purposes to Tobin bronze), with a hull drawing about five feet of water, a nineteen-foot centerboard, and every pound of ballast inside. Mr. Hanley is certainly right in at least two of his statements: (1), that there is little chance of beating Herreshoff at his own game (keel boats); (2), that the proposed centerboard would be an experiment.

West Point-Annapolis Baseball. It is good news that negotiations are pending, with excellent chance of success, for a baseball game this spring between the cadets of Annapolis and West Point. Nothing wiser has been attempted in regulating the athletic relations of the two national academies. The more frequently the cadets meet the less upsetting the result. If the athletic fever were distributed

over several branches of sports, the football game would not be viewed so seriously. The more games the better the sport, and the more wholesome its influence. Certainly the West Point and Annapolis fencing teams should meet every winter; it is a game they both know well, and each would profit by the meeting.

Perhaps there would be less hazing and fist fighting at West Point if the army officials would broaden their views, which always have been more narrow than those of high degree in the navy.

System in Road Making. The question of road building has become so vital throughout the country that there is instant attention for any one with something to suggest in the line of improvement. On the other side, in England, in France, and now in Germany, there has long been official and systematic supervision of road making and repairing. In America we are scarcely alive to the industrial needs and values of good roads. The bicycle and the League of American Wheelmen quickened the legislatures to life and have practically been the means of getting about all the action thus far taken. Now the automobile is spreading in the land, and the demand for good roads is becoming imperative.

Governor Odell (New York), in his inaugural message, takes up the question of road building at some length, and says very correctly that there should be system in all such work; that not only should the main thoroughfares be improved, but the intersecting roads should also be cared for, so that the counties of the State would not only be connected by continuously good highways, but cross sectioned by roads equally as good in quality, if less in width. There is no question of the excellence of this not altogether new suggestion; all the people do not live on the highways; undoubtedly a resident of any given locality will use the cross road in his neighborhood twenty times to once using the main road. This is all true and leads to the single wise conclusion of system being necessary in building; but how is it to be brought about? Up till now we have not succeeded in securing adequate constructive attention to the main roads, much less the cross roads; and the first thing for Governor Odell and every Governor to consider is how to bestir the leg-

islature to any activity on the question. It is a subject of sufficient importance to the country at large to warrant special consideration. Viewed only from an economical point it ought to move the legislators. It looks as though nothing substantial would ever be accomplished in the way of systematic road-building, until every State had a regularly appointed Road Commissioner, and an improvement fund supplied by appropriation or by special taxation.

But with full explanation of the League's purpose before me, I still hold the opinion that its official course has been narrow and selfish in the extreme, showing beyond peradventure that its regard for the sport was insignificant as compared with the concern for its own pet theories and schemes; for although there may be a technical difference between matinee and road-driving clubs, broadly speaking, their sport interests are identical. It is true that the clubs of the League represent the oldest and best class of amateur reinsmen; and that very fact makes their selfish course the more unfortunate. Not that they formed a League devoted particularly to matinee racing, but rather that they declined to lend official encouragement to the scheme for a National Association of Amateur Drivers.

It is only through a national body on the lines proposed that the sport of road and matinee driving will be permanently benefited; and for all the League members may say to the contrary, their interests are homogeneous. And there is great want of wholesome influence in amateur driving ranks. To begin with there is sore need of a clear distinction between amateur and professional. At present in road-driving clubs the attempt at classification is a farce and makes absurd all concerned with the legislation.

Until such distinction is made and really enforced, we can have neither respect for the driving clubs nor confidence in their utterances of reform.

In such work the influence of the Boston, Chicago, Cleveland and others of the League would have been of immeasurable assist-

ance, and it is for ignoring this—a plain duty, if the welfare of the sport was truly regarded—and organizing a little League for their own local and selfish interests that sportsmen criticise them. It is not too late yet for the League members to take a broader view and give substantial help to the sport of road driving. It needs it badly.

Amateur Driving Clubs League.

Through imperfect description by certain of its members it now appears that the *raison d'être* of the recently organized League of Amateur Driving Clubs has been but partially understood and some injustice done its sponsors. In the first place, Mr. H. K. Devereux, the League's President, writes us that neither in name nor in spirit does it pretend to national jurisdiction. As this was the very point emphasized by some of the members, while in New York, subsequent to organization, and the one which stirred all criticism—the explanation of Mr. Devereux puts a very different light upon the entire question. In the second place, Mr. Devereux says that the League is not for the purpose of jurisdiction over road driving, but amateur racing. This being so, it would have been well to choose an unequivocal title—since the present one is certainly misleading. The driving clubs devoted to racing, and the driving clubs concerning themselves with speedway or road driving, have been so indistinguishable as to lead to much confusion.

Racing, through the medium of weekly matinees (to which only club members are eligible, racing to wagon with a free gate), is the especial direction in which the Boston, Pittsburg, Cleveland, Chicago, Kansas City, etc., have been active. For some time a league by these clubs had been in contemplation, before Dr. Kane proposed his excellent scheme for a National Association of Amateur Drivers, and which Boston, Cleveland, Chicago, *et al* declined to support, because their interests were in racing and not in road driving. Thus the confusion between the two, and the misunderstanding of the Leagues scope and object when it was first formed.

ICE SPORTS

IN the larger eastern cities and among the northern colleges, the arrival of long-deferred winter weather has attracted attention to ice sports, and, prominent among them, ice hockey. This fascinating and healthful game has now been played south of the border line, for about seven years. It has supplanted ice polo in the New England colleges, obtained a firm hold on metropolitan sport lovers, and is more or less popular in Philadelphia, Baltimore, and Pittsburg.

Its chief promoters are the Amateur Hockey League and the Intercollegiate Hockey Association. The former includes the teams of the Crescent and New York Athletic Clubs, the St. Nicholas Skating Club, the Hockey Club of New York, the Skating Club of Brooklyn, and the Quaker City Hockey Club of Philadelphia. The College Association is made up of the Yale, Princeton, Brown, Columbia, and Pennsylvania teams.

The games are all played in three rinks, all of which have manufactured ice—viz., the St. Nicholas, New York City; Clermont Avenue, Brooklyn; and West Park Ice Palace, Philadelphia. In addition to these, there are similar rinks in Baltimore and Pittsburg. They differ from the Canadian rinks, and from those just constructed at Harvard, in that all of the last-named have natural ice surfaces, and are, therefore, dependent upon freezing weather.

The championship schedules of the two principal leagues cover a period extending from about the Christmas holidays to the middle of March; and the results of these games will find permanent record in OUTING.

THE outlook for the present season is satisfactory enough, and we shall, doubtless, have much enjoyable sport. The only cause for anxiety at present is the tendency, already exhibited in some of the preliminary games, toward unnecessary—in some cases vicious—roughness. There is a variety of strenuous, hearty, fearless play, which is properly rough. Good, vigorous body-checking, at or near the actual point of play, will not meet with objection from any one who enters into the spirit of manly, competitive sport; but "dirty" tactics, such as Russell, Wall, Dobby, *et al.*, were sometimes guilty of, last season, cannot be too sternly rebuked by management and patrons alike.

There are few changes in the *personnel* of the older teams of the Hockey League; and the Quaker City seven, new to league membership, retains Orton, Gorman, Rogers, and Wallace, of the old successful team of 1898–99.

Yale and Brown will keep nearly all of last year's squad, the principal losses being Campbell, of Yale, and Cook, of Brown. Princeton is just beginning the game, on a solid basis; but Captain Little, of tennis fame, has a large and ambitious squad of men, from which to select his final team. Columbia and Pennsylvania, with their exceptional facilities for practice, and several veteran players apiece, should round out good sevens.

The chief object of the writer, at present, is to encourage the vigorous development of this admirable sport in new sections. It is well played at Harvard, although faculty prohibition keeps the team out of the Intercollegiate League. At Cornell, Swarthmore, Haverford, and a few other colleges, there are desultory attempts, now and then, to give it place in the list of athletic pursuits; and there is no good reason why it should not be played with marked satisfaction at many Northern colleges, and in all of the cities and towns along the uppermost tier of states. Bowdoin, Tufts, Dartmouth, Williams, Amherst, University of Vermont, Syracuse, Rochester, Lafayette, the universities of Michigan, Illinois, Wisconsin, Minnesota, Nebraska, Iowa, and a score of others, to say nothing of schools, clubs, and Young Men's Christian Associations, from the Bay of Fundy to Puget Sound, might just as well have the excellent sport and wholesome recreation to be found in ice hockey.

A brief outline of the game, for the benefit of those to whom it is new, may not, therefore, be out of place.

HOW TO SECURE AN OUTDOOR PLAYING SURFACE.

IF there is not a small body of water available—a small, shallow body being preferable to a wide, deep one—let a field, or a good-sized vacant lot, be banked around the sides, enclosing as large an area as may be desired, and let it be flooded in cold weather. The flooding can be repeated as often as desirable, every night or two, if the weather be cold, and if used by a large number; and then you have your playing surface. This should be kept clear and hard. If cracks appear, they should be filled and flooded without delay, as otherwise there might be some serious trip-ups on the part of the skaters. The games should always be played on the new ice, before its surface has been cut to pieces by many skates. The puck, as the round rubber disc is called, will not slide satisfactorily on the cut-up, snowy ice.

As in basket-ball, and unlike football, there are no hard and fast dimensions for the actual playing space. It varies in different rinks, or on different ponds, but a good size is 150 feet in length by 60 feet in breadth. On some open-air hockey fields the boundaries are marked only by ropes or flags, and these, of course, will do, if no other plan is feasible; but the prettiest plays in the rinks are those in which the rubber caroms off the upright wooden sides, and is then carried forward, or treated as the player elects. A still more important advantage in the use of boards is the fact that the disc keeps bounding back into the field, and obviates interruptions in the play. If it simply slid out of bounds under the ropes, there could be no continuity of play. So, if possible, it would be better to make a set of board boundaries, about two feet in height, with braces on the outside to keep them upright, and with sharp spikes or nails to be driven into the ice, to hold them in place. These, being made in lengths of ten or twelve feet, would be portable and easily removed, if the ice was desired for other purposes.

DESCRIPTION OF THE GAME.

AN ice-hockey team is made up of seven men, four of whom are, according to United States rules, forwards; next behind the forwards, and stationed (at the "face-off," or beginning of the game) nearly half way between the forwards and the goal keeper, is the cover-point; next, in the rear of him, comes the point; and the man at the goal posts is the goal keeper or goal tend. The Canadians play three men as forwards, and the fourth is placed between them and the cover-point.

The minimum dimensions of playing surface, under the rules, are 112x58 feet.

The goals are marked by placing in the middle of each goal line two upright posts, four feet high and six feet apart. They must be at least five feet from the end of the ice, and should be firmly sunk into it.

The puck is a vulcanized rubber disc, three inches in diameter, and one inch thick all through.

The hockey sticks are wooden (second-growth ash is best), flattened into a blade at the bent end, the handle being round. The blade is about a foot long, and not more than three inches wide. The men dress, as a rule, in jersey shirts, lightly padded trousers, and woolen stockings. The Canadians scorn padding, and wear ordinary running drawers, of

scantier dimensions, but of heavier cloth. Most players wear shin guards, as in football.

No player should wear other than regulation hockey skates, which all skate manufacturers include in their catalogues. They are almost flat-edged, longer at the rear, and of extra toughened steel, to stand the wear and tear.

The puck must not be struck at, like a golf or polo ball, but is shoved along the ice, or scooped ("lifted" is the technical term) through the air.

The play starts in the center of the space by a "face," in which two opposing players line up, facing each other at right angles to the goal lines, their sticks on the ice, with the puck between, each man ready to shoot it toward the opponent's goal. When the referee whistles, the more dexterous, or more fortunate, player, securing the puck, tries to pass it to another of his own side, and meantime one of the other side tries to intercept it. Thus the play goes, back and forth, up and down, in and out, skillfully dodging around an enemy or jumping over his stick (but one must be sure-footed and very expert before it is safe to try this trick), passing from one to another of the same side, until the disc is worked down near the opponent's goal, when a "shoot" for goal occurs. To score, it must usually pass the goal tend as he stands right in the goal, and must go between the posts and below their tops.

IT would be idle to attempt to describe a full game. The rules are simple and brief, and after the rudimentaries have been learned, good coaching will do more to develop an expert team than whole chapters could, in an article like this. And good coaching is not so difficult to get. The northern cities contain many ex-Canadians who have located in business therein. Suffice it to say, that the *sine qua non* of success in hockey is team work, or, as the Canadians call it, combination play. Individual attempts to be brilliant are apt to be as fatal to team success in hockey as in baseball or football; I mean those in which a man is willing to make a personally brilliant play without regard to the interests of his team as a whole. The game is well worth the learning. It furnishes glorious exercise, calls for great endurance, suppleness, grit, and quick and correct thinking. Its great variety of action, rapidity of change, and always unexpected opportunities for brilliancy of effort keep everybody fully occupied—the on-lookers as well as the players.

CHARLES E. PATTERSON.

THE GUN

THE A, B, C OF MARKSMANSHIP.

THERE is a popular notion that the ability to shoot accurately is a gift. "The marksman is born, not made," says a military writer. On the contrary, I think that most men who are themselves good shots would reverse this maxim. Some, to be sure, learn an art more quickly than others. Some, through natural aptitude *and* hard training, become expert. A few, through some physical or mental defect, are hopelessly out-classed from the start, and no amount of practice will ever make them proficient. But there never was a man who could pick up a rifle for the first time and shoot straight, by instinct.

The "iron nerve" of which we hear so much, is rather a mental, than a physical quality. It means, command of mind over body—keeping cool under a strain—and it can be cultivated.

An expert of international reputation once told me the following story, of how he learned to shoot straight:

"I was a mechanic, working twelve hours every day, except Sundays; and Sunday shooting was tabooed in our neighborhood. I was so poor that it took me a long time to save up fifteen dollars for a rifle. When at last I got it, there was no one to show me how to use the gun. I set up a target in a distant field, and used to mount my high bicycle at five o'clock in the morning, when there was enough light for shooting, ride to my range, and put in a half hour's practice before breakfast. I am naturally very nervous, and, at first, I could not hit a flock of barns. But I had made up my mind to become a good shot. So I just set my teeth, and pounded away. Little by little, I gained control over my nerves. Finally, I managed to get an occasional half holiday, which I spent on the range of a rifle club, shooting alongside of old riflemen, and studying their methods. If I have succeeded, it is not on account of any physical advantage that I had over other men, but simply because I loved the sport for its own sake, and was not daunted by repeated failures." This gentleman is not merely a phenomenal target shot. He can get his deer on the bound, as handily as any one.

Another of my sharpshooter friends is near-sighted, and his right eye is unreliable, even with glasses. So he had to learn to shoot from his left shoulder, though naturally right-handed. This was awkward. But he, too, was an enthusiast of great staying qualities. Today, in spite of a misfortune that no training

can remedy, he is one of the best rifle shots in America.

IT is practice that makes the marksman—practice, with brains back of it. Barring those who are afflicted with chronic ailments, there is just one class of men who never can become good shots, namely: those who, after a few trials, become discouraged or indifferent, and give it up. The prime essential of a marksman is simply enthusiasm: not the enthusiasm that burns fiercely and is quickly spent; but the kind that glows with steady flame, and is not quenched by blunders and defeats.

IT is a mistake to begin rifle practice with a powerful weapon. Choose a well-made .22, using rim-fire ammunition. It takes less time, less trouble, and less money, to become a marksman with a .22, than with a .30 or a .45. Any one who can shoot well with a .22, will take to any other rifle as a duck takes to water. The man who has shot a .22 until he can drive tacks with it at fifty feet, will out-class nine riflemen out of ten who have never shot anything less than a military or big-game gun. The reason is, that he is satisfied with nothing short of nail-driving; whereas, they are content with any shot that would have hit a deer, and don't mind an occasional flier.

The .22 is not a toy. Its tiny bullets fly with astonishing precision, and will kill any game likely to be found within fifty miles of a city. With proper ammunition, it will hit a nickel at fifty yards, or a two-inch disk at 100 yards, when tested from rest by an expert. So you cannot blame wild shots upon anything, but the man behind the gun. As your practice will be at short range, your own eyes will tell you the result. You cannot scold the marker, or the wind, or the light, or any other bugaboo of long-range marksmen. The gun will quickly teach you what is your besetting sin—whether it be flinching, wobbling, haste, carelessness, over-confidence, or what not—and this is the most valuable thing you can learn. Our virtues take care of themselves.

With a .22 you can even practice at night, in the basement or attic of a city house, by fitting up a back-stop, with two Welsbachs or electric lights diagonally in front of it, and reflectors to focus light upon the target. Your range, then, is always at hand—always ready, day or night, for a few minutes' practice, taking nothing from your hours of business or social engagements. The ammunition is absurdly

cheap. You can shoot to your heart's content, without bothering to reload shells. The report is so slight that your indoor practice will disturb nobody. A few scores two or three nights every week will advance a man more rapidly on the road to marksmanship, than a whole day on the range once a month. Now, when the temptation to shoot is always present, and the facilities are always handy, you will shoot ten times more than you would with a gun that can only be used far outside of city limits. And it is practice, I repeat, that makes the marksman.

You can take the .22 along on picnics and excursions, shooting at unknown distances, at moving objects, and at living targets, where a larger caliber would be too dangerous to be thought of. With so light a charge there is no perceptible recoil, and you are not so likely to contract the fatal habit of flinching, as with a kicking gun. The high trajectory of the .22, and the sensitiveness of its little bullet to wind, are really advantages to a beginner, because they teach him, within the limits of his own vision, those fundamental laws of gunnery, that are so hard to learn at longer ranges.

IN selecting a rifle, nearly every novice first asks, "Which is the best make?" That is tackling the problem at the wrong end. All reputable rifle makers use practically the same processes; but each of them turns out rifles of different patterns. A rifle is a tool, and its merit depends upon what you want to do with it. Nobody would try to cut glass with a bucksaw. Now, the work that a rifle can do depends upon how it is loaded—in other words, upon the cartridge. Consequently, the cartridge is the first thing to study. Whether the gun is to be a repeater or a single shot, bolt action or block action, is of minor consequence.

Cartridges are primarily distinguished as rim-fire or center-fire. A center-fire cartridge can be reloaded. This is no advantage in a .22, because you want cheap ammunition, and no bother of reloading. Of rim-fire .22 cartridges there are several varieties: some good for this kind of shooting, some for that, and some good for nothing. Among the good-for-nothing .22s are the BB caps, shot cartridges, and (up to date) all rim-fire cartridges loaded with smokeless powder. The good .22s are these: .22 short, .22 long-rifle, .22-7 Winchester. The common .22 long is inaccurate, and the .22 extra long is obsolete. Now, carefully dis-

tinguish between these names. One of the commonest blunders is to call any .22 longer than the .22 short, "a .22 long." There is only one .22 long, and it is unreliable. The three that I have recommended have the following qualities:

.22 short—Loaded with three grains of black powder, and a 35-grain bullet; retails in some stores as low as 24 cents a hundred; very light report; extremely accurate up to 25 or 30 yards, and shoots pretty steadily into a 1½-inch circle (about the size of a squirrel's head) at 50 yards; unreliable at greater distances; killing power hardly sufficient for squirrels, though you can kill an ox with it if you hit him in the right spot; excellent for indoor target practice, for frog hunting, and for exterminating sparrows or other vermin. Limited range makes it comparatively safe in the suburbs (but a chance shot from it may kill a man at several hundred yards—so don't be a fool). Bullet has outside lubrication; consequently, greasy to handle. Cartridges should not be carried loose in the pocket, or they will attract grit, and spoil your rifle barrel.

.22 long-rifle—(Note particularly that word *rifle*, for it distinguishes a good cartridge from a bad one.) Loaded with 5 grains black powder and 40-grain bullet; marvelously accurate; will hit a nickel at 50 yards with regularity, a 2-inch circle at 100 yards, and even shoots with precision up to 200 yards in a dead calm—but the least wind deflects the bullet. Aside from its extra weight of bullet, the reason for the superior accuracy of this cartridge is, that the shell is not crimped on the bullet, and all the bearing-surface of the bullet projects beyond the shell, so that when the breech-block of a rifle is closed upon this cartridge, the bullet is pushed bodily into the grooves of the rifling and centered there, leaving no chance for a jump between chamber and rifling, nor for a tipping start. In other words, the bullet is seated in the barrel as it would be in a muzzle-loader. The base of this bullet is smaller than the cannelures. Hence, if you try to extract an unfired .22 long-rifle cartridge by simply opening the breech, its bullet will probably pull out of the shell, remaining in the barrel, and must be pushed out with a wiping rod. This is annoying in a repeater, as, in case of a misfire, or inadvertently extracting a loaded cartridge, the gun is jammed, and powder is spilled into the action. Consequently, the .22 long-rifle is

more suitable for a single-shot rifle than for a repeater.

The bullet has outside lubrication. As the lubricant extends over a long-bearing surface, it does its work well, and a hundred consecutive shots may be fired without cleaning, the last shot being as accurate as the first.

THE report of a .22 long-rifle is louder than that of a .22 short, but not too loud for indoor shooting, unless you are on the street level. The killing power is sufficient for squirrels, rabbits, ducks, etc., the penetration being $5\frac{1}{2}$ inches of pine at 20 feet from the muzzle.

.22-7 Winchester—Charge, 7 grains black powder, and 45-grain bullet. This is a more powerful cartridge than either of the others. The bullet has a flattened point, which tears more than a sharper point. I have killed turkeys, and other large birds, with this load, at 150 yards. Not quite so accurate as the .22 long-rifle, but shoots straight enough for all practical purposes. The bullet is seated deeply in the shell, so that all lubricant is covered. This makes it cleanly to handle. As the shell is crimped, and the bullet flattened, this is the best .22 for a repeating rifle. The report is sharp and whip-like, but not loud enough to seriously alarm game.

Some rifles are chambered and rifled for the .22 short, only. Some will take both the .22 short and the .22 long, but will not spin the longer bullet of the .22 long-rifle, because their twist is not sharp enough. Others, again, will take all three of these cartridges. But a .22-7 rifle will take the .22-7 Winchester cartridge, and none other.

If you want a .22 exclusively for outdoor shooting, and, especially, if you want a repeater, my advice would be to choose the .22-7. But if you wish to practice indoors, with shorts, and to hunt small game as well, take a single-shot rifle, chambered and rifled for the .22 long-rifle cartridge.

At another time I will offer some suggestions on fitting up a .22 and on how to shoot straight with it.

HORACE KEPHART.

THE CARE OF QUAIL IN WINTER.

SPORTSMEN in outlying sections should see that the excellent prospect for grouse and quail next season is not marred by neglect. The number of quail left in the covers is quite sufficient to insure good sport for next autumn, providing the winter continue only of average severity. To properly care for the left-over quail, which must furnish the breed-

ing stock for next season, is not too difficult a task. The members of a gun club or a half dozen of the sportsmen of each town and village may easily take care of the quail in their district. The winter enemies of the quail are deep snow, with long-continued severe weather; a "crust" on deep snow, usually caused by rain followed by a cold snap; hawks of two or three varieties, and half-wild cats which have learned how to forage in the covers instead of performing their proper work about the farmhouse and granaries.

The best remedy for cats and hawks is a charge of shot, administered on sight. A good and wise cat has no legitimate business in quail cover, nor will it be there unless it is hunting quail. *Ergo*, when found there shoot it good and dead and swift and sudden.

The antidote to the bane of quail life—snow, cold and "crust," or a blending of the three—is plenty of good food. In exceptionally severe weather it is lack of food, rather than cold, which destroys the birds. Indeed, I might almost say that a quail will not freeze so long as its crop is full. Let the grain be placed where the quail can get at it during the worst of the winter; then go over the ground now and again after cold snaps and shoot any hawk or cat you may detect prowling near the quail. I will wager that the bonnie brown birds pull through all right. This slight trouble is a deal better than losing good, hardy Northern-bred birds, and having to replace them with new and softer stock from the South.

VALUE OF PROPER PROTECTION.

IN a recent number of that excellent journal, *Shooting and Fishing*, a statement appeared that, owing to the law forbidding the sale of ruffed grouse, the birds were again fairly plentiful in districts where they had become very scarce. This is not to be wondered at. The no-sale law strikes directly at the root of the evil—the snarer. Abolish all forms of trapping. The game can withstand an astonishing amount of fair shooting. Half a dozen clever snarers will destroy more in one county than all the guns in that neighborhood.

A LONG period of protection appears to have done something in behalf of the caribou in Maine, yet the actual amount of good accomplished seems as yet to be problematical. These nomads of the North are extremely difficult subjects to deal with. A creature with a larger bump of locality and a more pronounced habit of sticking to a neighborhood would be an easier proposition.

E. W. SANDYS.

FORESTRY

Conducted by Gifford Pinchot

FORESTER OF THE U. S. DEPARTMENT OF AGRICULTURE.

MEASURING THE FOREST INFLUENCE.

SERIOUS attempts to discover and describe, in terms of cubic feet per second, the actual effect of forest cover on the flow of streams have, until recently, been practically unknown. During the last year, however, such an attempt has been made by the United States Department of Agriculture, and certain preliminary results have been reached. One of the most important of these is the proof, that watersheds similar in all respects, except in their forest cover, discharge the water from the same storms in very different ways. The measurements show comparatively little difference in the rapidity of the rise, after a heavy rain, between the streams which flow from forest-covered basins and those whose basins are bare. But the height of the flood in the two is not the same, and, most important of all, the time taken to return to the normal flow is very different. The forest is shown to delay the discharge of the flood waters to a marked degree. The storm water from a forest-covered basin, therefore, is available long after that from a basin without forests has flowed by and disappeared.

EVAPORATION AND EROSION.

JUST how necessary to the prosperity of the irrigable West the forests really are, is not always evident at first sight. The loss of water from evaporation, and the practical destruction of storage reservoirs (and less completely of the distributing canals as well) by their filling up, with silt carried by the streams from denuded slopes, are two of the most vital dangers to irrigation; and, for them both, the forest is the remedy. When we remember that the loss of water by evaporation in an irrigated part of Arizona has risen to thirteen inches in a single month, the possible waste is nothing less than appalling. Against it, the forest is the first and greatest safeguard, as it is also against the tying up (to use a term not strictly applicable) of irrigation works by silt.

The consequent impoverishment of large numbers of once prosperous farmers is as old a story as it is a sad one.

"The reservoirs," says Vice President Elect Roosevelt, "cannot last if they fill full of silt, and the only way to prevent this filling with silt is to preserve the forests themselves. The forest is a great sponge for absorbing and distilling water. It is the great preventor of erosion, and erosion is always the danger point in any irrigation system."

PREVENTABLE DISASTERS.

THE far-reaching effectiveness of intelligent foresight in dealing with such questions as these is almost beyond overstatement, as the

lack of it is almost certain to be punished beyond our expectation. From perfectly preventable over-grazing, I saw, this spring, a dam filled so full of silt, from the erosion of denuded slopes above it, that the owner had dug a ditch through the center of it, to let the water through. We are far too apt to consider that obvious, and, so to say, habitual evils—like the loss from fire and flood—are without remedy. In the present instance, the remedy is perfectly well known. A letter from Secretary Wilson, to the recent Irrigation Congress touches on this matter in a way that demands repetition. He says:

"The water problem, like the forest problem, is essentially and primarily one of conservation and use. The waste of water in floods, and the waste of forests by fire, are parallel losses; each utterly hostile to the best interests both of the farmer and of the nation at large, and each preventable by perfectly well-known means. Enlightened public opinion, and the use of expert skill, are the two forces which are indispensable, if we are to 'save the forests and store the floods' in accordance with the admirable motto of your Congress."

FORESTS AND IRRIGATION.

ONE of the most vital functions of the forest in the national economy, is the protection of water supplies. Nowhere else does water bear so mighty a part in the well-being of the people as in the irrigable West. The very existence of a population depends upon it. Forest protection is of crucial importance to the irrigator, and the irrigator is coming to realize it. This fact was strikingly in evidence at the Ninth National Irrigation Congress, held in Chicago November 21 to 24, 1900. This congress is composed chiefly of delegates appointed by the governors of the states and territories. Its motto at this meeting, and the keynote of its deliberations was, "Save the forests, and store the floods." To it, as the expression of a great national movement, Vice President Elect Roosevelt addressed a letter, so valuable as a forest document, and so complete as a statement of the situation, that I am sorry the readers of OUTING cannot have it in full. There is space to quote only a single passage here.

"We are just getting to understand what is involved in the preservation of our forests. Not only is an industry at stake which employs more than half a million of men, the lumber industry, but the whole prosperity and development of the West, and, indeed, ultimately of the entire country, is bound up with the preservation of the forests. Right use of the forests means the perpetuation of our supply both of wood and of water. Therefore, we cannot afford to be satisfied with anything short of expert and responsible management of the national forest reserves, and other national forest interests. The forest reserves must be cared for by the best trained foresters to be had, just as the storage reservoirs must be built and maintained by the best engineers. There is the same need of trained skill in handling the forests in your best interests, as there is in building the great dams which will some day bring population and abounding prosperity to vast stretches of so-called desert in the West."

THE THOROUGHBRED

THE year 1900 will go into history as one of satisfactory results for the best interests of the thoroughbred race-horse. Viewed internationally, the sport has, the world over, been somewhat above the average; although it is doubtful if any horses of phenomenal merit performed in England, Australia, or on the Continent. I do not doubt that many followers of the turf in America, will expect a similar expression in regard to our own record; but I view the year as having developed a really remarkable (if not genuinely phenomenal) two-year-old in Mr. J. R. Keene's *Commando*. The juvenile merits of the big son of *Domino* will doubtless furnish a fruitful topic for discussion for a generation to come; but, personally, believing that *Spencer's* carelessness cost *Commando* his only defeat, I regard him as at least the best horse which 1900 produced in any country; and I have no twinges of conscience in allotting him a place with such genuine American juvenile flyers as *Sensation*, *Tremont*, *El Rio Rey*, *Potomac*, *Domino*, and *Hamburg*.

THE year's phenomenal occurrences in the sales ring were led by the realization of 37,500 guineas for the late Duke of Westminster's four-year-old *Flying Fox*, sold at *Kingsclere* (England), in March. This figure is likely to long constitute the record price for a single thoroughbred. The *Eaton Stud* also furnished the phenomenal yearling sale of the year, when such unprecedented figures as 10,000 guineas and 9,100 guineas were, respectively, realized for the *Persimmon-Ornament* filly (which has been named *Sceptre*) and the *Orme-Kissing Cup* colt. The *Eaton* dozen brought a total of 43,300 guineas! A single consignment of seven youngsters, by the lamented *Hanover*, furnished the American yearling record for the year, realizing \$71,200, of which the colt out of *Correction* brought \$20,000. The auction record for an individual American yearling, however, remains the \$38,000 paid for the "gold brick" *King Thomas*, in 1888; and it was a singularly lucky escape for the purchaser that he was coaxed into turning the colt over to a defeated bidder for a \$2,000 advance, only a day or two after the sale!

SPORTSMEN are rejoiced that the year 1900 should have enabled the Prince of Wales to achieve his cherished ambition of leading the list of English winning owners, with the very satisfactory total of £29,585. It is also an event of distinct international importance that he should have won the "triple event" of the Two Thousand, the Derby, and the St. Leger, with a colt of his own breeding, especially be-

cause this colt is a full brother to the royal owner's two previous great winners, *Florizel II*, and *Persimmon*; as also to *Sandringham*, who has just been imported to America for stud purposes. The year also saw the Prince of Wales win the Liverpool Grand National Steeplechase—the "blue riband" of 'cross-country sport—with *Ambush II*. Another of his turf triumphs of 1900 is to be found in the fact that *Florizel II* furnished four two-year-old winners to the English list, including the Derby favorite *Volodyovski* and the unbeaten *Floriform*.

AMERICAN winning owners in 1900 were led by Mr. James R. Keene (\$111,357) and Mr. William C. Whitney (\$92,545). It is especially appropriate that the highest honors should have been secured by such staunch and liberal patrons of the turf. It is to be regretted, in a sense, that both gentlemen have so succumbed to the attractions of English racing as to send the flower of their respective establishments abroad; but this is only what might have been reasonably expected to ensue, from the exceedingly stupid manner in which the framers of American programs have, in the last decade, ignored the senior animals, and catered to the juveniles, in the establishment of great prizes. The only consolation to be derived from the exportation of our high-class stock is in the fact that the movement will naturally result in more reliable deductions as to the relative merits of the English and American thoroughbred. Mr. Keene's horses won £7,680 in England, in 1900, where Mr. Whitney won only £2,253; but both gentlemen were only upon the threshold of their racing careers there.

THE leading American owner in the English list, for 1900, is Mr. J. A. Drake, whose meteoric career placed £10,598 to the credit of his colors. This fact is mentioned in these columns, however, mainly because it becomes a most fitting prelude to the consideration of the English Jockey Club's exoneration of Trainer *Enoch Wishard*, and Jockey *Lester Reiff*, who were in control of the turf destinies of both Mr. Drake and *Richard Croker*. The charge against *Wishard* and *Reiff* grew out of the inconsistent running of Mr. *Croker's* *The Scotchman II*, with *Lord Durham's Gerolstein*, at *Doncaster* and *Liverpool*; but their exoneration completely demonstrated the truth of my statement, made last month, that all foreigners who conduct themselves properly will find in England a thoroughly fair field.

W. H. ROWE.

KENNEL

CONCERNING BUYING AND IMPORTING DOGS.

"ALL that glitters is not gold," and "imported" before a dog's name may mean simply that he has crossed the water. It is no patent of excellence in looks or purity of pedigree. A prospective importer should look beyond the bare announcement, intended to catch his eye, that "Marcus Antonius, XX, repeated his victory at Barn Elms, again beating Napoleon." Too many importers fail to ascertain that "Marcus" is in his eleventh year, and that his usefulness is about gone. They do not often even inquire how many entries there were at Barn Elms, but are content with the fact that the dog has won "over a hundred prizes," many of which, in all probability, were won at little shows, where there was no competition. A first-prize win counts in the list, to the uninitiated, for as much as if it had been won at Crufts or the Palace. The "innocent" writes for the price, and with it comes another long list of wins, with the price frequently made high in order to make the dog appear of high value. Importers should always look up the winnings of the dog, note carefully what competitors he met, and their quality, and read intelligently the reports of every one in the class, in the three best dog papers in England. If, after this searching inquiry, the dog appears likely to answer the requirements, a letter to any of the editors of the reputable kennel papers of England will obtain the name of a judge of that breed of dog, whose decision can be implicitly relied upon. The owner of a dog naturally appreciates his own possessions, and therefore the suggestion is made, that a disinterested and thoroughly competent person, should be asked for an honest opinion. The writer speaks from experience; as, having once lived up to these suggestions, he secured a dog that had been underesteemed; yet, after its importation, it won eighty-seven first and special prizes, without being once defeated. Taking it for granted that the suggestions have been acted upon, and a satisfactory purchase made, remember that "eternal vigilance" is the price of success in the show ring. See that your dog is kept in perfect health, through the medium of clean food (regularly given), a clean bed (preferably of corn husks); that it is kept where it is free from damp and drafts, and groomed daily with dandy brush and chamois leather, so that its coat is perfectly clean. So attended to, and with bones well covered, round, neither fat nor lean, it will at any time be in a proper condition.

THE COMING OF THE SCOTTISH TERRIER.

IT seems that at last the Scottish terrier is to fill the place for which he is eminently fitted. There is scarcely a single standard of other dogs that has not been pruned, and trimmed, and gerrymandered to a greater or less degree; but the Scottish terrier has escaped the "lightning change act." Since 1881 there has been no change whatever in its standard, and the result is most gratifying; for breeders are able to mate their dogs year after year, with the knowledge that there is no likelihood of the points of excellence of this season being changed ere the year has passed. There is, perhaps, no single breed of terriers that breeds so truly as a Scotchman. This accounts, in no small degree, for the general excellence of the exhibits. In matter of coat he is infinitely preferable to many of the other terriers; in point of cleanliness he is most scrupulous, while in the field where his services are desired, he has no superior. Just at the present time his cause is being espoused by many of our lady exhibitors, and that is a harbinger of ultimate triumph.

THE ETIQUETTE OF THE SHOW RING.

THE ethics of dogdom are, to accept defeat gracefully; and those who are not able to do so, should cease exhibiting. The following, taken from the rules of the Ladies' Kennel Association of England, will show that etiquette is just as essential in the show ring, as it is in the drawing-room:

"54. Etiquette of the ring. Members of the L. K. A. will, it is earnestly hoped, set the example of maintaining silence while judging is proceeding, and of refraining from all conversation whatever. While the judging is proceeding, exhibitors should try to preserve absolute silence; and any breach of the etiquette of the ring may, if reported to the Honorable Secretary of the L. K. A., be dealt with as misconduct, under rule 33.

"55. Altercation with the judge. Altercation with the judge, as to his ruling, or the addressing to him of any remarks regarding an exhibit in the ring, shall be held to be misconduct, under rule 33."

The fact that such rules had to be promulgated, is evidence of the existence of that objectionable personage, the kicker; and well framed, and firmly-carried-out, rules are the only means of dealing with the trouble.

W. H. HUNTINGTON.

UNIVERSITY FOOTBALL

REVIEW OF SOUTHERN SEASON, 1900.

THE season of 1900 disclosed some of the prettiest, and most ragged, football ever played in the South. Seldom had there been such good material for the teams; and never before had injuries and sickness so impeded the work of captains and coaches. The games between the larger and smaller teams provided evidence, such as the North has been supplying for several years; *i. e.*—that the smaller are rapidly improving.

A few years ago when Nally was captain of Georgia, the latter made quite a spurt, and joined the leaders, but, for the last two years, Georgia has not won a game of importance, closing this season with a score of 35 to 0 against her, in the Thanksgiving game with Auburn.

180 pounds, but her playing was a disappointment. Auburn defeated her so badly that she left the field early in the second half—which was a very unsportsmanly action. Sewanee won from her, after a hard fight, and Vanderbilt had no trouble in taking the Thanksgiving game by a score of 18 to 5. Her action in the Auburn game is to be deplored, and may have serious results.

It is quite probable that the ram of prophecy is at last coming out of the West to overthrow this goat of the four horns. Texas undoubtedly had one of the strongest, heaviest teams in the South; and if her eastern trip had been possible, another tale might have been told. As it is, the only means we have of comparing her work with the other good teams, was the



A. C. HOBSON,
VIRGINIA



VIRGINIUS DABNEY,
VIRGINIA



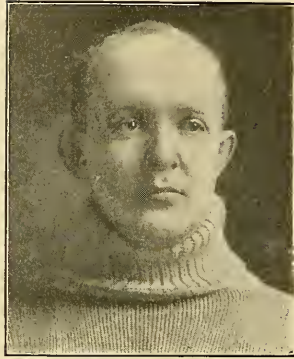
ORMOND SIMPKINS,
SEWANEE

The latter team, from all accounts, has played its usual fast and tricky game, but its position is hard to determine, owing to its not having met the larger teams. Tulane is another example. She was not scored against during the entire season, yet, as having only played smaller colleges, no estimate of her real strength can be made. The University of Nashville has made great strides in the past few years. She has consistently a strong, heavy lot of men; and the time must come, when, with proper coaching, she will take her place among the strongest. The team this year was the heaviest in the South, averaging

game with Vanderbilt, which resulted in a victory for Texas by a large score, 22 to 0. With the other exception of the Kansas City Medicals (beaten 30 to 0) other Texas victories were over small teams; but her growth in athletics has been steady and strong. Of the minor colleges, the Polytechnic Schools deserve especial mention, those of Alabama, South Carolina and Virginia particularly. The games among the larger teams repeated the old story of the uselessness of comparative scores. North Carolina defeated Vanderbilt 48 to 0, and immediately after played a tie game with Sewanee. Vanderbilt



F. M. OSBORNE,
N. CAROLINA.



W. H. POOLE,
SEWANEE.



F. BENNETT,
N. CAROLINA.

a week later evenly played Sewanee, though the score of 11 to 10 stands against her. Virginia beat North Carolina 17 to 0, and Sewanee 17 to 5, but Sewanee lost as much by miserable generalship at critical points, as by the superior playing of the Old Dominion lads. She had no great trouble with Virginia's line. All in all, Virginia is unquestionably entitled to first place in Southern football.

ALL-SOUTHERN ELEVEN FOR 1900.

Simpkins (Sewanee), full-back.

Dabney (Virginia), and Seibles (Sewanee), half-backs.

Poole (Sewanee), center.

Choice (Virginia), and Sams (Texas), guards.

Bennett (North Carolina), and Loyd (Virginia), tackles.

Hobson (Virginia), and Osborne (Carolina), ends.

Others whose work entitled them to mention are: Bolling (Sewanee) and Harvey (Auburn); Simons (Virginia) and Johnson (Nashville), McCrea (Carolina), Edgerton (Vanderbilt), Newman (Tennessee), McBride (Georgia).

I find this a hard team to make up, because some of the best players in the South are ineligible—notably Walker and Nalle, both of Virginia. The former has exhausted his playing period, and, unless I am greatly mistaken, Nalle played last summer on a semi-professional baseball nine at Memphis. Devlin (Georgetown) is another—a typical George-

town athlete, who plays baseball under an assumed name and is, of course, out of all consideration. McCall and Russ, of Texas, are also out of it, both left Texas immediately on conclusion of the football season.

Unless more honesty of purpose is shown pretty soon in Southern football, we shall be compelled to ignore the entire field in our annual reviews. There is a crop of promise annually but very little fulfillment. The Southern Intercollegiate Association is not attending to its duty with proper care or aggression; it is too passive. We want some explanation, too, of the playing on Vanderbilt of Fugler and Jenkins, two men who came out of the North at the eleventh hour.

At Virginia there is nothing to prevent a man entering the university (without examination) playing all season and leaving immediately on its close, as happened this year at Texas. Southern athletics need a good stirring up and a congress of faculties to agree on such rules as we have in the North—and to subsequently enforce them.

ON THE PACIFIC COAST.

THE past football season on the Pacific Coast is not one to which the big California universities can point with much pride. The State Universities of Oregon and Nevada are hardly more than small colleges, and both at Palo Alto and at Berkeley it was commonly supposed that they might cut out work for the Freshman teams, but not much beyond that; yet these two small colleges invaded California, played

the big University teams, and returned in glory—Oregon with California's scalp, and Nevada with Stanford's!

On the first meeting Stanford won against Oregon, 34 to 0; and Berkeley against Nevada, 32 to 0. In neither game did the big teams have a walkover; what the lighter teams lacked in weight they made up in activity and condition, and they made their bulkier opponents fight for every point. The next week Nevada went down to Palo Alto and beat Stanford in a hard-fought game, 6 to 0; whilst Oregon forced California to touch-down for safety. The explanation of over-confidence, and mud, is not enough to account for such reversals as these. The fact is, in the first place, Oregon and Nevada had the better team spirit; in the second place, though they had but one or two substitutes, and were without trainers and rubbers, they were in better physical condition; thirdly, and by no means lastly, they played cleaner football.

As usual, the preliminary games of Berkeley and Stanford were mainly with the Reliance Athletic Club of Oakland, though the San José Normal School, for the first time this year, sent out a fairly good team. In these preliminary games Stanford made the better showing, and, up to the Oregon and Nevada games, it looked as if the "big game" were checked to Palo Alto.

WITH these remarkable reverses fresh in mind, few felt confident of the outcome when Stanford and California lined up on Thanks-

giving Day, and the event justified the feeling. In one of the slowest, least spectacular, and, perhaps, hardest fought games, ever played between the Universities, Stanford won in the last five minutes by a field goal. In the first half the California backs and tackles plowed through Stanford's right tackle at will, down to the 5-yard line, where they missed a try for goal. Three times during the game Berkeley tried for a goal from a drop-kick, and each time the ball either went wide or was blocked. In the second half, particularly after changing center and quarter back, Stanford reversed the rôles of the first half, and broke through the Berkeley line for large gains. Like Stanford, the Berkeley line stiffened at critical times and prevented a touch-down, so that Stanford tried three times to score by place-kicks, the third being successful.

Excepting the ends, Pringle, of Berkeley (tackle), and Seelye, of Stanford (guard), were about the only men in the line playing up to University form. But both pairs of ends played sharp, fast football, and effectually discouraged all attempts at end running.

The kicking on both sides was fair, Hill, of Stanford, on the whole, having a trifle the better of it, though More (Berkeley) was credited with one punt of 66 yards.

In one respect, both teams showed a distinct falling off from all Thanksgiving games played up to '99, and that was in the matter of clean playing. Up to last year, notwithstanding the intense rivalry between the institutions, Stanford and Berkeley had always played clean,



W. W. BURNETT,
LELAND STANFORD.



NEIL W. SNOW,
MICHIGAN.



JAMES R. HENRY,
CHICAGO.

straightforward football; but this year, Clay (Berkeley guard) was ruled off, before the game was five minutes old, for slugging. Raitt (Stanford full-back) was repeatedly warned for attempting to break his opponents' signals; whilst neck twisting and elbow work were not wanting. Like their erring brethren in the East, the managers sinned in admitting a throng of old players, managers, and the coaches to the side lines; the result being that Stanford, through no fault of her own, was penalized for side-line coaching.

According to the intercollegiate agreement of last winter, the Stanford-Berkeley games are hereafter to be played earlier in the season, on college grounds, and under the guidance of graduate coaches.

But gate money of over \$25,000 from the Thanksgiving game is an item which the managers are loath to part with, and there are already signs of a movement, amongst the undergraduates of both institutions, towards repealing some, if not all, of the above conditions. It is to be hoped the two faculties will hold the students to the agreement.

INTERCOLLEGIATE football on the Pacific Slope dates from the big contest between elevens representing the Universities of California and Leland Stanford, Jr., in March, 1892. This, however, was before the "invasion" of Eastern coaches, among the most prominent of whom, since then, have been Walter Camp, McClung, "Pop" Bliss, Heffelfinger, Frank Butterworth, George Brooke, Garrett Cochrane, Harry Cross, Burr Chamberlain, Addison Kelly, and F. H. Yost.

Both institutions started under the "Yale system" of coaching, Camp and McClung being the pioneers; but Stanford has employed Brooke, of Pennsylvania, and Yost, of Lafayette, and with signal success. California, for the past three years, has been taught the Princeton methods by Cochrane and Kelly. There have been ten football contests between these elevens, three resulting in ties, Stanford being the victor five times, while California has won only twice in the last three years.

AN ALL-WESTERN ELEVEN FOR 1900.

Page (Minnesota), center.

Riorden (Wis.) and E. Dietz (Nthwstn.), guards.
Curtis (Wis.) and Warner (Ia.), tackles.

Aune (Minnesota) and Snow (Michigan), ends.

Dobie (Minnesota), quarter.

Henry (Chicago) and Larson (Wis.), halves.

Knowlton (Minnesota), full.

At center, Page, of Minnesota, who has played the position for three years, is easily in the lead. Of the other Western centers, Scow, of Wisconsin, and Ely, of Iowa, come next—with very little choice between them. For guards, Riorden, of Wisconsin, and Dietz, of Northwestern, are to be preferred, although Mueller, of Minnesota, and Flynn, of Minnesota, are nearly their equals. In the tackle position, Curtis, of Wisconsin, may be selected for one, while Warner, of Iowa, and Fee and Tweet, of Minnesota, are so evenly matched for the other position, that a selection among them is difficult. As Warner is brilliant as well as steady, and experienced, the choice should be rather given to him. File, of Chicago, should come next.

At end, Aune, of Minnesota, and Snow, of Michigan, stand out conspicuously as superior to all others. Next in the list should be placed, without hesitation, Hoyt, of Minnesota, and Juneau, of Wisconsin.

Behind the line, in half-back position, there are a number of men to be considered. Henry and Sheldon, of Chicago, Larson and Cochems, of Wisconsin, Van Valkenburg and La Faus, of Minnesota, have all shown an ability in the position that would entitle them to consideration. But first choice rests upon Larson and Henry, with Sheldon and Van Valkenburg for second place.

There are only two candidates in the West for the position of quarter-back. These are Dobie, of Minnesota, and Williams, of Iowa. Both men are quick and accurate in passing, and runners of great swiftness. In all-round play, and in general knowledge of the game, the two are about equal. As a field general, Williams is the superior of Dobie, but in catching and running back punts, Dobie has no equal in the West, if, indeed, he has in the entire country. Dobie, too, is a punter second to none, and in aiding the runner in interference, is slightly better than Williams. The position of quarter, therefore, goes to Dobie; allowing Henry, of Chicago, to captain and direct the running of the team.

At full-back, Knowlton, of Minnesota, deserves first place, with Sweeley, of Michigan, for second choice. Knowlton is a long and accurate punter, a reliable catcher, and a brilliant runner with the ball. He has kicked a number of "drop" goals, and goals from placement, from the field, but his strongest point, the one in which he has no equal, is on defensive play in backing up the line.

Interscholastic Football review will be published in the next issue.



BOB SLEDDING AT QUEBEC.

OUTING

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KING WINTER IN HIS CITY HOME

By Leon Vandervort

MOST of us have never experienced a real winter, and know only the poor imitation with its snow flurries and thaws; its cold rains and storms of sleet; its week of sleighing and weeks of warm, south winds, when slush comes over the shoe tops and pneumonia runs riot in the land.

The coming of real winter is like the approach of a besieging army which spreads itself about the city walls and sits down to remain indefinitely. Real winter comes in earnest and stays four or five, or six long months. He brings snow in quantities to block trains and cover fences. He freezes the mercury, turns our ears white, and lets us know that he is king. With him winter brings an intoxicant that, having once tasted, mortals crave forever after. Summer has her own liquor, but it does not stimulate. It steals over the senses with an effect like opium. We dream the lotus eaters' dream, and are content with dreaming. But not so with winter's draught. It sets every nerve tingling. Action is what you crave, and action you will have. With this action comes a thrill so intense that you care not for needles of frost, or pangs of hunger, or even threats of death. They who have tasted this inflaming wine in the Arctic remember it forever after.

It is scarcely an exaggeration to say that only one city in America has winter of the genuine sort. But one there is, and that one is Quebec. Perched upon her plateau with the icy St. Lawrence at her feet, and the endless stretches of Canada's snows at her back, she stirs in the heart of

the brave a consuming desire to push forward to the very citadel of King Winter, amid the snows and icebergs about the northern ocean.

When winter comes to this quaint capital she knows he will stay for more than a day, and is prepared.

Kipling's very small boy of Quebec who

"When asked, 'Are you friz?'"

Replied, 'Yes, I is,

But we don't call this cold in Quebec.'"

is a type of this old winter city's inhabitants. No weather is called cold for the reason that nobody ever thinks of the cold. The frayed-out remnants of a New England "cold snap" will send the Louisianians scurrying to their wraps and their fireplaces. But a blizzard fresh from Baffin's Bay does not disturb Quebec. She expected cold weather; prepared to have a good time, not in spite of it so much as with its aid, and forgets to ask whether it is cold or warm. In fact, when she does stop to think of it at all Quebec is certain that her climate is mild and temperate. Express your doubt and some kindly old scion of sunny France will declare that there are really months when the city has no snow at all.

Ask the landlord if there is anything good at the theater.

"There is no theater," he answers.

"Christmas week and no play or opera?"

"Quite so; the theater burned down more than a year ago and no one has rebuilt it."

And you are puzzled until night begins to settle down. Then the low-bodied sleighs

King Winter in His City Home

are flying along the streets; the skating rinks are thronged; groups of blanket-clad forms are gathering at the resorts of snow-shoers to tramp some miles over the snow for the pure joy of the exertion. Out on the Cove Fields toboggans, bobs, and little sleighs are starting from every point on the ridge, and rushing madly downward to a common center about the cartridge factory. You wonder no longer that the theater has never been rebuilt. There is no need for a theater. Every one is too busy sleighing, or skating, or snow-shoeing to care for the play. They have tasted the winter stim-

This winter spirit creeps over us even as we dismount from the train and take our places upon the awkward little ferry boat. There is the old St. Lawrence filled with floating ice masses, like some current between two Arctic lands. Our boat is pushing and crowding her way through this floating ice field, toward the gray old citadel that looks down upon us

"Like an outpost of winter, dull and gray."

The wind comes in from the northwest. It is not like most winds we have known. They stop harmlessly when they strike



"OR ONE OF A PATTERN COPIED FROM ST. PETERSBURG."

ulant and they must be ever on the move. In the South you may dream and be happy. But here there is no dreaming. No one may dream when winter is spurring him to act, and action is making his blood race through his veins with the joyous throbs that come from doing. This thrill is the thrill of battle. Life is one round of resistance. Defy the Arctic winds; conquer the snow banks, and you have caught the essential of life in Quebec and are happy. Look at the rosy cheeks of youth and maiden. Look at the angle of the shoulders and the poise of the head; those are rewards of this life of conflict.

one's wraps. But this cuts right through and goes to the very bone of the unprepared newcomer.

"Go downstairs," says a deck hand. We know it is warm down there, but we prefer the deck, with this new kind of wind. Why? Merely because the spell of winter is upon us. That wind would drive us. It rouses our fighting blood. We stay on deck, and, having defied the blast, feel very manly indeed, and begin to throw our shoulders back as do these handsome sons of the north about us.

We land, and the dock is thronged with cabmen whose eyes look out between the

furry borders of cap and overcoat. Each has a two-seated cariole with bearskins and buffalos, among which you may muffle up as secure from cold as in an eider sleeping bag. Now the carioles fill and dart away toward the plain above, or toward some outskirt on the lower land.

Here is Quebec in winter! Sleighs, sleighs, sleighs everywhere. Here is a long low delivery sled with a high box; there is a baker's sleigh. Here is one of rough boards for drawing wood. There is a funny little thing with hopper box for hauling

Now our cariole turns to climb the hill and we pass from "Lower Town" to the plain above. Everywhere the jingle of bells goes merrily on, and everywhere are the marks of winter. Here are half a dozen soldiers from the garrison clad in the Queen's furs. There is a policeman, belted and padded like a Russian. Yonder is a group of children with low, short sleds. Dressed for winter; fur-capped, bright-sashed, with pretty buckskin moccasins over their warm, red woolen stockings, they tumble in the snow and lose themselves in the banks as though



TOBOGGANING ON THE COVE FIELDS.

away snow from banked-up curve and drifted alleyway.

Perhaps we pass a market and see a dozen contrivances on which produce is brought from the little farms, to be sold here in Quebec. In more ways than one these market sleighs tell of winter. This is loaded with calves that will stand up as straight as they ever did in life, for the frost seized them and made them ice as soon as life had gone. There are rabbits and deer saddles as hard as granite, and here is a cartload of milk in clear, white cakes that will be cut up in pieces and sold by the pound to matrons who set it aside to thaw.

Quebec were Coney Island and snow drifts were ocean surf.

This might be Russia or Sweden so far as furs and sleigh bells, ice and snow drifts go.

One is reminded at every turn that this snow city is more than a mere isolated collection of human life. It is the entrance and exit to a vast land of snow and ice, of mountain and forest, of furs and fish and monster kinds of deer. Here comes a stage which rushes along toward the post office from some settlement twenty miles out along the snow banks. There are other stages too, which dash away for longer

journeys; carrying mail and food and rifle cartridges to homes only less securely locked in winter's grasp than are the villages on Greenland's coast.

The sight of these stages suggests pictures of wonderful charm—pictures of those who live in the snow-wrapped country north and

great company whose name is a synonym for Canada. Or, perchance, they are tramping over the snow, with packs on their backs and guns in their hands; starting with the dawn and stopping with the dark to drink their hot tea and wrap themselves in blankets all too thin for a night of



"A SLEIGH OF ANCIENT FRANCE."

east. Who are the men that await the coming of that sleigh? Yonder on a big lake is a village where farmers come from their little half hidden homes, in strange old sleighs of their own make, to hear from the outer world, and to take back the tobacco and tea that do so much to shorten these long months of winter. There, too, come hunters and trappers, tramping through the forest and across the hills on snowshoes; some picturesque in blanket suits and some looking commonplace enough in their well worn winter garments; but all with the firm tread and the carriage which mark the Canadian; a type as distinct from our more southern Americans as are the Viking-like Nansens of Scandinavia from the mild sons of Italy. And farther back, back among the scattered stations where mail goes seldom, or not at all till summer, live other strong men. They are laying in a supply of fur, or looking after the interests of the

shivering sleep. Such are the pictures of life and sport that come into the mind when one sees these old stages rushing out of Quebec, or creeping through snow drifts beyond the gates.

Time was when this town had no winter outlet by rail, and he who would reach the outside world might take his choice between tramping on snow-shoes and riding in the old-time "diligence" with its high seats, its long, low body and its narrow runners. That was how one had to make the trip to Montreal. Those were exciting days of sleighing, for one could never tell just when the blizzard would come down to blind horses and driver, nor be quite certain on starting in the morning that the night would not be spent camping in the sleigh.

But though the railroad has come to give an outlet toward the south and west, Quebec is not lacking in suggestions of the

old days. Go out upon a country road to the eastward and you will meet an Indian, or a half-breed, with a little sledge drawn by dogs. Stand down about the markets and watch the farmers bringing in their produce. There are sleighs that range from the days when Napoleon was young to the present. Or better still, stand upon Grande Allée when the moon has risen and watch the passing throng of sleighing parties.

The cariole with its furs and its low box is the favorite sleigh. But here and there you catch glimpses of the old order. For Quebec is a conservative town, and her old families are as proud of their ancient origin as of their present culture. And where there is pride in an old order of things there will be ancient relics. So it comes that many a descendant of some distinguished seigneur of Champlain's day has, stored away in his stable, a sleigh of ancient France or one of a pattern copied from St. Petersburg or Stockholm, or

what romance he would have. What stories of hopes and despairs, of gladness and sorrow, of loyalty to the old and loyalty to the new, lie hidden in this mixed population with two languages, two ancestries, two religions and two systems of ideals. But besides all this what other hopes and fears and wild, mad thrills in those young hearts that fly past, fur-hidden, between the great high seats of the cariole. The sea shore may have its summer flirtations, but where in this whole wide world will Cupid find such infinite possibilities as among the fur robes of a cariole, whence two ruddy faces look upward at the white Canadian moon and glittering stars, and sideways into clear, bright northern eyes.

Here beats the proud heart of one whose ancestors came to Quebec in the days of Champlain. As glad is he of his lineage as are his cousins among the Creole families of the Crescent City. And there is reason for the pride. Did not those ancestors



THE QUEBEC CARIOLE.

Switzerland, perhaps. These on frolic occasions are brought forth, and if you watch the drivers dashing merrily along Grande Allée you will catch glimpses of Frontenac's Quebec, and Peter's Moscow, mingling with twentieth century Canada.

If one could only analyze this line of sleighing merry-makers, what poetry and

leave the sunny land of France, when America was a wilderness, to push westward and southward along the great lakes and down the Father of Waters, to hold, for their king, the waterways of a great new world?

And yonder are sons of the conquering race that swept Montcalm's forces from

the Plains of Abraham, and raised Britannia's banner over the Gibraltar of America. But past them dashes another sleigh in which the two peoples mingle, as happy and as friendly as though their bayonets had never clashed on this same plain.

Historical associations are second only to the moon as breeders of romance. Here they are in the very air. Now the road skirts a wall on which are mounted old muzzle-loading rifled cannon. Again it turns past an open space behind another mass of stone, where half a dozen little

they wished for the Transvaal. They meet a party of good-natured, rollicking privates. Tommy is in high esteem just now for he may be needed in South Africa. Such is not always the case, for he is too busy, much of the year, playing pranks, to be very dearly loved by the civilians about him.

Anon we meet a party of sleighs belonging to the Tandem Club—the gentleman's driving association of Quebec. Out across the Plains of Abraham they go, or over the hills beyond the city. These are amateur



"MINGLING WITH TWENTIETH CENTURY CANADA."

mortars sit with an insolent, bull-dog air looking off across the river. Now we pass an entrance to the citadel and again through one of the great gates. Back behind us, on the field we left, is where Wolfe and Montcalm fell. Below on one of the narrow little streets Montgomery was shot. "Ill-fated" Montgomery, they call him. But why ill-fated? What better fate could man ask than that his end should come with the spell of a Canadian New Year and the thrill of battle united.

Yonder cariole is filled with handsome young officers of the garrison. To themselves and to each other they bewail the fate that has kept them in Quebec when

drivers who love pure sport as they love winter; who vie with one another in the management of tandem teams, and who meet on the cold, sunny afternoons to make Quebec's roads merry with parties of winter lovers.

The sleighing does not stop with Grande Allée, nor the Plains of Abraham, nor with Lower Town. Out upon the country roads go the carioles—out—out—out. Now a hill—almost a mountain—rises on the left, and now again the St. Lawrence spreads out along the right. Eastward a party goes, and, eight miles out from the citadel gate, brings up before the little hotel at Montmorency Falls.

"ON FROLIC OCCASIONS THE ANCIENT RELICS ARE BROUGHT OUT."



There is another way to reach the hotel. Those who have good legs, good lungs and strong hearts, prefer it. They leave the sleigh by the railway station at the Falls. They climb a stairway and rise a hundred feet upon a hillside. Then they turn sharply to the right and climb up and up along a narrow drifted path—the hill above and almost a precipice below.

It is worth the climb to stand there upon the banks of snow and look down upon the roaring, icy falls, to turn one's eyes out upon the ice floes of the river; to catch the twinkle of the city's lights eight miles away. To see this all spread out at one's feet beneath an Arctic moon, that seems not half so far away as the city itself; to feel in one's blood and nerves something of the charm which comes to the invader of Arctic lands, is worth many and many a climb by moonlight at the Falls.

But onward, hidden among the trees at the other side of this tableland lies our hotel. Here is gathered a party of Quebec's merrymakers whom we saw flying in carioles down Grande Allée. They gather now about the red-hot wood stove and the table, eating and drinking. Later on their laughter and their shrieks come floating in from the toboggan slide.

Would any but a brave race of winter-defying men and women ever become tobogganists? Would any one less strong of heart than these children of the Northland ever take the first hair-raising slide? Ugh! that first slide on a toboggan! You sit upon a narrow little seat and hold a rope; you wish you could grasp the sleigh itself. You look ahead. The icy track shoots downward at a deadly angle. Waiting for the start is like waiting for the drop which ends the life of the condemned. You feel sure that it means death. An awful lightness comes into your chest and up into your brain. You would give anything to be away—anything but the self-respect that you would sacrifice by running—you even think of paying that price. Then you are off! Oh, the awfulness of despair that comes over you as you dash away cruelly near to those posts below. You shut your eyes and experience again one of those awful nightmares of childhood when you fell and fell and fell, until you awoke safe, but shivering, in bed. But when the rush is over you are again on the slide. Now, you would not have missed that ride for worlds.

All are not sleighing to-night. Back in the city, on foot, by car, and by cariole, you see men and women—athletes every one of them—hurrying to a rendezvous. They are clad in pretty suits of many-colored blanket material. They are members of one of Quebec's snow-shoe clubs. For snow-shoeing is one of the sports of Canada.

When all are present away they go from the meeting place. Out past the city's gates they march; they strike the drifted fields or forests and swing away with the self-reliant stride of the veteran snow-shoer.

They tramp, perhaps, half a dozen miles. Then comes tea drinking at some inn or farmhouse, and a return through the same stinging, spurring, intoxicating winter air.

But bright nights and calm weather are not essentials of this sport. Many snow-shoers there are who love to feel the sting of driving snow against their cheeks. So many a stormy afternoon finds parties of the blanket wearers wending their way across the drifts, thrilled by the opposing forces.

One might look long and patiently for winter sights before he would find a brighter, livelier scene than that presented in the Quebec skating club. The rink is not open to the public, and those who gather here are like the members of a country neighborhood in their friendly merriment. About the rink, keeping to the outer edge, circle those who skate merely for the sake of skating. But nearer the center have gravitated those whose feet keep time to the music of the orchestra, who cut waltz figures as they circle and glide and wind, hand in hand, across the glittering ice.

But it matters not what may be our point of view. Whether we stand within the rink to hear the click of skates and shouts of the skaters, or go out upon the streets, where sleigh bells jingle and the bright snow crackles, or stand where the cruel old stone walls of the citadel meet the historic plains; whether we look down at the sparkling drifts or up at the burning stars, back at the city's lights, or away toward the freezing river, we see winter, we feel winter, and we bow to him as king. We feared his coming as that of some sullen tyrant. But now that he is here we know him for a very merry monarch who fills our hearts with song and laughter, as well as a very earnest one who inspires us to feats of strength and courage and floods our souls with the longings of chivalry.

THE NEED OF TRAINED OBSERVATION

By Theodore Roosevelt

EVERY hunter *ought* to be a field naturalist, and *must* be an observer, if he is to be a hunter in anything but name. His observations will deal primarily with the animals he pursues, but if he is wise, they will also cover a wide range of other subjects. The professed naturalist owes much to his sporting brother. This, of course is especially true as regards big game, and, indeed, as regards all the rarer quadrupeds which vanish before the advent of civilization. It is a real misfortune when a man who has exceptional opportunities for observing the wild life of these creatures fails to take advantage of his opportunities, for too often they have vanished by the time the trained scientific man comes upon the field. Moreover, the latter is apt to be absorbed with his observations of the numerous lesser forms of animal life, which stay in the land, and the records concerning which therefore do not have the same value. It is for this reason, by the way, that the big game hunter who has scientific aspirations should not lose his sense of perspective, so to speak, and neglect the work which he alone can do, for the sake of that which can be done at any time by any of those who may follow in his footsteps. Thus in Dr. Donaldson Smith's recent record of his noteworthy explorations in Africa there are appendices devoted to catalogues of beetles and botanical specimens. This is all very well in its way, but it is not one-thousandth part as important from the larger scientific standpoint, as would have been a full and accurate account by the Doctor of the life history, and indeed the physical peculiarities of the rhinoceros, with which he was brought into such intimate and often unpleasant contact. It is not so important as a full and detailed account of such incidents as the fighting between the lions and hyenas, of which he was an eye witness.

Every big game hunter ought to be an observer. If he keeps a record of his observations, one of his first experiences will be to find that they seemingly conflict with those of some other observer equally

competent. If he is hasty he will conclude that the other observer is not telling the truth; and the public at large will conclude that they cannot both be right. Now, of course, it is perfectly possible that they both are right; and it is possible, on the other hand, that while each has seen a part of the truth, he has not seen all. In any observation of this kind there are varying factors. In the first place, two men may not see the same thing alike; and in the next place, one man may not see the same thing quite alike on two different days; while finally, two animals of the same kind may act utterly different, or one may act differently at different times, or all of those who dwell in one place, or who are observed at one season, may behave very differently from those that dwell in other places, or are seen under other circumstances.

When these conditions are set forth in print, they seem such obvious truisms as hardly to be worth putting down. But as a matter of fact they are continually forgotten in practice. Even a trained observer will make mistakes, and those, who, though eager and interested, have no special training or knowledge, are sure to err much more frequently. Besides, the language which one person uses to convey a somewhat unfamiliar idea, may to another person convey this idea in a totally different form. For instance, at one time I was a great deal in the cattle country, and in the spring time, out on the treeless wastes, I frequently came across sage fowl. On a still, clear morning at dawn I would often hear the love notes of the male and, going toward them, have had to travel a very long distance before coming in sight of the bird himself. The impression gradually fixed itself upon my mind that there was a considerable volume of sound, which I described as "booming;" and at first I was rather impatient of correction when a friend of wide experience insisted that it ought rather to be described as clucking, and was by no means a powerful noise. Yet I afterwards became convinced that

my friend was, in the main, right, and that my impressions of the sound were due less to the sound itself than to the stillness, the loneliness, and the uninterrupted, measureless expanse of the surroundings. In another matter connected with this same bird, the difference in certain observations was due not to anything in me or the surroundings, but to a variation in the habits of the bird. I had always found sage fowl far away from trees, on desolate flats, where there could be no ranches. But in 1892, near the head waters of the upper Missouri, I came upon them more than once in parties right by the river, among the small cottonwoods, and on at least one occasion, so near the garden of a settler that I was for a moment doubtful whether they were not domesticated.

Wherever any man has the opportunity to observe but a few individuals of any species, and of course when his observations are hurried, there is every chance for a conflict of testimony. For instance, I recall two friends, each with about an equal experience in shooting our large bears. One has been repeatedly charged, and has a most wholesome respect for the grizzly's prowess. The other, who has killed an even larger number, has never seen the grizzly display anything but abject cowardice, and down in the bottom of his heart I think he regards all tales to the contrary as impinging somewhat on fancy.

In my own experience I have generally found the mountain sheep to be a very difficult animal to bag, far more so than deer or elk. One of the hands on my ranch, however, who had killed several, always insisted that the direct reverse was the case, and that, as he expressed it, they were "dumber" than deer. Another friend who was accustomed to European chamois, not only considered the big horn by comparison a stupid, but also by comparison, even a bad climber—a statement I found very hard to believe. In the United States from the days of the earliest explorers to the present time, the big horn has always been, as his name implies, a mountain sheep; but his giant kinsfolk of Asia are often not climbers at all, dwelling on huge plateaus, level or rolling, and with little or no cover.

It is quite impossible to reconcile some conflicting statements made even by the most eminent authorities. I suppose that

all of us who care for a hunter's life have read, with peculiar interest, the exploits of our fortunate brethren who have shot in that grandest of all the world's hunting grounds, Africa, and the most enthralling chase is naturally the chase of dangerous game. African hunters are agreed that the lion, elephant, rhinoceros and buffalo are the four kinds of game, the pursuit of which must be considered as dangerous. But when the question is as to which is the most dangerous, every variety of opinion is forthcoming. We must, of course, disregard absolutely the untrustworthy writers, who practise a melodrama degenerating into opera bouffe, like Girard, whose accounts of lion hunting in Algeria are almost pure romance (in striking contrast to the admirable descriptions of that great French hunter, M. Foa). But even when we examine the writings of men who have the highest claims to serious consideration, we are met by irreconcilable differences of opinion, and even differences of fact. Taking four such men, all with wide experience with all the kinds of dangerous African game, Mr. Selous considers the lion by far the most dangerous; Mr. Jackson ranks the buffalo first; Sir Samuel Baker insists upon the elephant; and Mr. Drummond gives the palm to the rhinoceros. Of the rhinoceros, by the way, Messrs. Selous and Jackson speak almost with contempt. Again, take the hyena. Most writers on African sport treat the hyena as an exceedingly cowardly and harmless animal. But some of those who write of Somaliland and the north, not only treat of its ravages among the flocks, but also of its frequently preying upon men, and I have already alluded to Mr. Smith's account of its prowess even against the lion.

Closely allied animals certainly show marvellous differences of conduct in different localities. It is hard to give any satisfactory reason for the undoubted fact that throughout Asia, and in many parts of Europe, the wolf is often a dangerous foe to human life; whereas, in America such an event as an attack by a wolf upon a human being is almost unknown. On the other hand, the big American bear, until much molested by hunters, was undoubtedly far more to be dreaded by man than any Asiatic or European bear. Yet another puzzle is offered by the fact that in America the black bear, almost every-

where, outlasts the wolf as settlements advance, while in Europe the reverse is the case. It is not easy to see why a comparatively clumsy animal like the bear, which is less prolific than the wolf, should outlast it. Yet such is undoubtedly the case throughout our Atlantic States.

Turning from big game, let me take an example among our own familiar birds. To many people, including myself, the voice of the Western meadow lark has a peculiar charm. It happened that my early associations with the Eastern meadow lark were such that I rarely heard more than its chatter, and not the plaintive song-note which I have since grown to love. But to me the Western meadow lark is an incomparably better singer. Yet I have seen the opposite opinion upheld, even in a journal like *The Auk*. I wonder how much association really has to do with our appreciation of bird songs? A great deal undoubtedly, as witness particularly the cases of the old-world nightingale and sky lark. These are extreme examples of birds with a literary reputation so great that hardly one man in a hundred who writes of them does anything but accept what other writers have already said of them.

It must remain true always that the surroundings inevitably influence any observer's judgment and appreciation. For instance, any hunter will probably at once assent to the statement that the love challenge of the bull elk, heard, as it so often is, on a frosty night in the mountains, echoing down through the pines, is one of the most musical of all nature's major sounds. But if heard close by, or in a zoölogical garden, it loses almost every element of attraction.

This same elk, or, to give him his proper name, Wapiti, affords a very curious instance of an entirely trustworthy and well qualified observer being utterly mistaken in his judgment. The late General Dodge was one of our best writers upon sport in the plains and among the Rockies in the old days. He observed elk by the thousand under all conditions. Yet he actually believed that the elk was a mild-mannered beast and that the males hardly ever fought among themselves! To most of us it seems incomprehensible that even a day's experience, where there is any large

mixed herd of elk, should not convince any man of the exact contrary. Wapiti bulls fight together even more freely than black tail or white tail bucks, and are also more apt to turn upon outside enemies.

Then there are entirely different problems in observation; problems concerning the seemingly unaccountable differences two similar species will display under like conditions. Why is it that among the grouse of the plains, the largest of all those found within our boundaries, the sage grouse is the tamest? while among the grouse of the woods, the spruce grouse, which is the smallest, is the tamest? The ruffed grouse is tame also, in out-of-the-way localities, but he is never guilty of such utter folly as the stupid, handsome little spruce grouse. Is the tameness of the white goat when compared with the mountain sheep a parallel case? or does the white goat become as wary as the sheep when equally persecuted? My own experience would lead me to answer the latter question in the negative; but I should much like to have the judgment of men who have seen more of both animals.

I have here mentioned only a few instances where there is need of trained observation among hunters and hunter naturalists. Each man should school himself to accuracy of observation. And yet each man should remember that not only he himself may err, but that the same animal may act in an entirely different manner under different conditions, or indeed under the same conditions. Some of the seemingly inexplicable differences in the character and habits of different creatures which I have mentioned above are doubtless due to differences in the observer, and equally without doubt some of them are due to variation in the animal itself, this variation being either individual, seasonal or local. Only by numerous observations taken by keen and trained observers would it be possible to reconcile or explain these differences. Only when such observers are sufficiently numerous will we ever get really satisfactory life histories of the rarer and more interesting wild beasts; and surely the production of such a life history is better worth while than mere hunting either with gun or camera—good in itself though this mere hunting may be.

THE MAKING OF THE ARTIFICIAL FLY

A PRACTICAL TREATISE AND SOME HISTORY

By John Harrington Keene

THE construction of the artificial trout, bass and salmon fly, is without doubt, one of the fine arts of this period of angling history. From the simple "bonnie Red Heckle," tied on the bare hook, to the inspiration known as the "Jock Scott," with its fifty-five pieces of gorgeous raiment, each fly needs mechanical skill and ingenuity in its making. And when to suit some ultra-fastidious angler, "Jock Scott" is tied on a hook not half an inch in length, a feat I have repeatedly performed, it may be confidently said that the highest point in fly production has been reached.

How long the "fraudful" fly has been in use cannot be discovered. Ælian in the third century after Christ, speaks of the Macedonians catching a speckled or spotted fish from the river Astracus, by means of an imitation of a little fly which hovered over the river. This insect was termed by the natives, Hippurus, and was thus imitated, according to Dr. Badham's version of the old poet-naturalist-historian. "They fasten," he says, "red crimson wool round a hook, and fit on to the wool two feathers which grew under a cock's wattle." This is the first mention of the "hackle," and stamps the feather as the most ancient of all materials in the construction of the artificial fly. So also we find in the same writer a pregnant sentence which asks:

"Who hath not seen the scarus rise,
Deceived and caught by fraudulent flies?"

Which clearly points to fly-fishing. Of a verity "nothing is new but that which is forgotten."

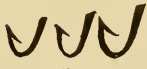
The earliest reference in the English language to fly-fishing is in one of the first books ever printed in that tongue. The "Treatyse of Fysshynge wyth an Angle," by Juliana Berners or Bernes, prioress of St. Albans, printed by Wynkyn De Worde in 1496. It is true there are some doubts as to the authorship of this treatise, but

the fact remains that it was printed some five hundred years ago, and that it contains concise and very explicit directions, as to the materials and selection of flies for each month of the year, during the trout season. The primitive shapes of the hooks (Fig. 1.) clearly foreshadow the productions of to-day. Taking the Pennell "sroat" hook (Fig. 2.), as the very best form of fly-hook now in use, and comparing it with the hooks figured in the "Treatyse," the difference is by no means radical. Indeed, there is a striking similarity discovered when we read the directions given by the fair writer for their making, and find that her methods are almost the same as those followed to-day in the workshops of Harrison and of Allcock at Reddich, England. Here are the words of the worthy Prioress: "Ye shall put the quarell (square-headed needle) in a redde charkcole fyre that is to be of the same colour as the fyre is. Thenne take hym out and lete hym kele (cool) and ye shalle find hym well alayed (annealed) for to fyle. Thenne ryse the berde (beard) wyth youre knyfe, and make the point sharpe. Thenne alaye hym againe: for elles he will breke in the bendyng. Thenne bend hym like to the berde figured hereafter in example (Fig. 1.) The greter hooks ye shall make in the same wyse, of gretter nedlis, as broderers (embroiderers) nedlis, or taylers, or shomaker nalles (nails), in especyal the best for grette fysshe and that they bend all the point whenne they be assayed (tried) for elles they ben (be, are) not good. Whenne the hoke is bendyd bete the hynder end abroad, and fyle it smoth for fretynge (binding) of the line. Thenne put it in the fyre agyn, and yeve (give) it an easy redde hete. Thenne sodaynly quenche it in water, and it wolle be harde and stronge." The astute hint "to bend all the point" is of much value, and is followed to-day by the makers of the "Pennell" hook, for if on examination the bend of the hook does not give with an



Fig. 3.

JAPANESE HOOKS.

Fig. 1.
THE HOOKS
DESCRIBED BY
DAME JULIANA
BERNERS.Fig. 2.
THE PENNELL
"SPROUT."

even elasticity on its being bent, it is obviously of inferior and unreliable temper and will straighten or break on impact with the jaw-bone of a fish. On such hooks as those shown in the wood cut (Fig. 1.) (for the original "example" was undoubtedly a wood cut, and one of the first printed), the artificial flies of the period were tied, and only the vivid imagination of one of the "gentle craft" can supply an idea of what must have resulted from the union of such hooks, and the following dressing of the first fly for March, given by the quaint authoress of the "Treatyse." Here it is: "The donne (dun) flye. The body of the donne woll, and the wyngs of the pertryche." This fly evidently had no hackle for legs, but later on in the work it is plain that the red hackle was used for this purpose. There is a description of a capital imitation—so far as material goes—of the May-fly, in the section devoted to April. It runs as follows: "In the begynnyge of May a gode fly, the body of roddyd (beaten) woll & lappyd about (ribbed) with black sylke, the breaste of a drake (mallard) and of the redde capon's hakyll." The latter is of course intended for the legs of the fly, and in Fig. 14 I have shown this fly in the modern manner of tying and disposition of material. It is evident to my mind that the good dame meant the same fly that even now in early summer rises in myriads on the chalk streams of old England.

The fly with the unbarbed hook which has been in use from time unrecorded by the Japanese, for the capture of their little trout, termed Ayu, may antedate the hook with the barb. I am assured by an eminent professor of Tokio University,

that this is the case. The original bend of this hook (Fig. 3.) is almost precisely similar to some sent me several years ago by Seth Greene, which he had himself made from needles, pretty much as did the Prioress. He used them when he required to catch fingerlings and did not wish to injure the fish. I have tried them, and have been astonished how few fish get off, and I have used the little gaudy Japanese flies, with their gold amalgam beads at head and tail, with unexpected success. But I do not recommend the barbless hook as a steady diet, though I am sure the barb of many a large hook would be the better for filing half away, when the fish are biting shyly. This is, however, by the way.

If the red hackle is the most ancient fly material of which we have any record, it is certainly the most useful. The so-called brown or red hackle-fly—for the terms are nearly convertible—when tied in its simplest form is at once easy to make, and most effectual. On streams and trout lakes where the fly-rod of man has seldom or never bent, or on the over-fished waters of Europe, this combination of hook and feather is always productive, and a *dernier ressort* of ready availability and usefulness. It is evidently mistaken by the fish for some water larva, or for a representative of many larvæ of similar average characteristics of form and color. But in all seasons when the trout take the fly, it is beyond all other lures the most generally productive. This, I take, will be allowed by brethren of the craft as an axiom.



Fig. 4. First Stage.

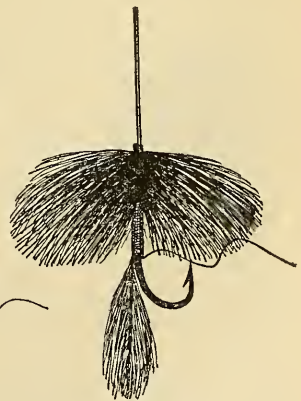


Fig. 5. Finished.

PENNELL HACKLE.

Listen in this connection to the rousing chorus of the old "North Country Fisher's Garland":

"Up angler and off wi' each shackle
Up gad and gaff and awa'!
Cry hurra' for the canny red heckle,
The heckle that's tackled them a'!"

The following directions followed closely will enable the angler to make this fly in a few minutes, even by the open stream, and this is an accomplishment no fly-fisher should be without. It applies to not only the brown feather, but to every other right-sized and right-colored feather, and is the step which every one must take at first in this beautiful art of fly-tying.

Mr. C. Pennell, in his "Modern Practical Angler," some twenty-five or more years ago, was the first to give directions in print as to the easy making of the brown and other hackle flies. I have not his work available but have tied so many thousands of these flies, and as they were originally tied long before he was born, I shall use my own words. In Fig. 4 we have the first completed stage of the elementary brown hackle. It almost explains itself. The hook is tied on the gut snell by a well waxed thread of silk, and then a hackle of suitable size is laid sidewise on the hook shank. It is then whipped by the midrib to the hook, and tied securely as shown at A. Holding the hook between the thumb and forefinger of the left hand, and passing the silk thread down, out of the way, between them, the tyro takes the tip of the feather between the thumb and forefinger of the right hand, and makes five or six coils of the hackle around the hook shank, (or more, according to the size of the hook), taking care that he does not overlap any of the coils. He then ties the feather as shown in Fig. 5, and when the thread is snipped off, the fly is finished. The end of the hackle makes a tail to the fly, if so desired, or it can be snipped off. According to the color of the silk used, so is the body of the hackle, and the wax therefore should be colorless. A good wax without undue stickiness, or any color, is made by mixing over a slow fire or a spirit lamp: two ounces best yellow resin; one drachm white beeswax sliced, and two and one-half drachms fresh lard. When it has simmered fifteen minutes, pour into cold water and pull, like candy, till cold.

For large flies two or more hackles may

be superimposed and wound as above directed. Nearly all feathers can be used in this way, if the midrib in covert feathers be sliced somewhat and when the learner has made practice his handmaid, his work will take on a finish which will increase his delight as the work grows under his hands.

I have no hesitation in saying that the fly next in order of usefulness is the Coachman. Like the majority of our favorites, this fly was originated in England. It was invented by Tom Bosworth, coachman to three sovereigns of England—George IV., William IV., and Victoria. He was well known around the Royal Borough, and I have talked with several inhabitants of Windsor who remembered his skill with both whip and fly-rod. The fly was intended as a night or dark day fly, and it serves its purpose in this country on all occasions, besides those for which it was originally intended. The origin of the name is obvious. No fly-fisher's book should be without it in several sizes, and I therefore give the simplest ways to make it:

Having selected the hook and tied it to the snell, as shown at A, Fig. 6, cut a few strips of the herl from near the eye of the peacock's plume, and take three turns of the waxed silk around them as shown, snipping off the extra lengths near to where they are tied. Then holding the bend of the hook between the finger and thumb of the left hand, take the fibers of "herl" between the right finger and thumb, and wind them evenly up the shank of the hook. Hold them there with the same hand, and wind over them, in a loose coil—three or four turns—the tying silk, to retain them in shape and to reinforce the generally brittle and easily destroyed feather. Tie with two half hitches and snip off the loose ends close, as shown in Fig. 7 at A. This forms the body of the fly. The process of hackling is somewhat a nice one. I would advise all who have not been taught in childhood to tie without a vise, to tie *with* one. This vise simply consists of a watchmaker's pin-vise, mounted on a clamp or with a broad screw turned on the end, which permits of its being mounted on a bench or good firm table. Assuming that the worker has this simple tool, he now places the hook in its jaws firmly, and turns his attention to the selection of a suitable hackle. It is the brown hackle again, and should be from the game

cock's neck, and of length of fiber just sufficient to reach to the point of the hook from the extreme end of the shank. Before attaching it, it should be stroked between finger and thumb, against the grain, or set of the feather, so as to separate the fibers, and the nail of the middle finger should be pushed against the roots of the fibers along the midrib, from tip to quill. This requires some little practise, but the object is to render the under side of the

as it were, equally and neatly from the center formed by the hook-shank. Of course it can be placed on the shank in like way to that of the "Pennell," but the latter is the neater way and the one generally preferred. Tie in the tip of the hackle as indicated at B, Fig. 7, and snip off the end. Then roll it round several times as in the case of the "Pennell" hackle, only in a reverse way; that is, toward the end of the shank, and after stripping all the waste

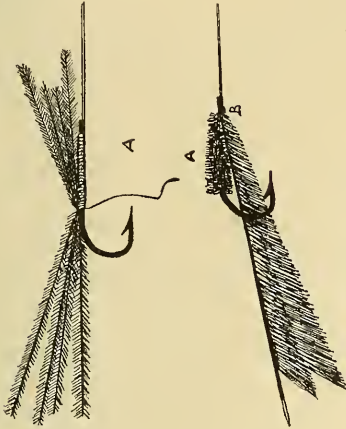


Fig. 6.

Fig. 7.



Fig. 8.

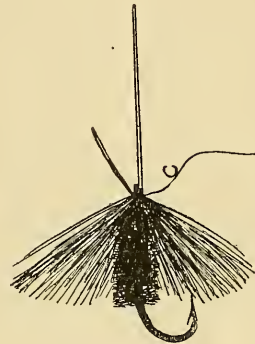


Fig. 9.



Fig. 10.



Fig. 11.



Fig. 12.



Fig. 13.

COACHMAN.

6. First Stage. 7. A, Second Stage. B, Third Stage. 8. Turned Hackle. 9. Fourth Stage (finished as a Brown Hackle). 10. Wing Feathers. 11. Fifth Stage. 12. Reversed method of winging fly. 13. Finished.

feather concave, or rather to make the hackle resemble a tapered and inverted trough of fibers, as shown in the diagram. The reason for this is, that when the hackle is wound, the fibers will radiate

fibers, tie it as shown at C, Fig. 9. If now the quill end be snipped off and a few turns more of the silk be made around the end of the hook, to form a head, we have another form of the brown hackle, which

is conventionally made with a peacock-herl body.

But to finish the Coachman, we must wing it. Two strips of feather are now cut or torn, from a right and left wing quill of a white goose, or turkey, or dove, or indeed any white-winged bird, though those named are preferable, Fig. 10. These strips will match and must be laid one on the other as shown in Fig. 11, and held close by the left thumb and forefinger, while the tying silk is passed twice, up over and down and then tied with two half hitches. This completes what is termed the "laid on" wing and is generally used in Great Britain. In this country the best flies are usually made with "reversed wings," because of the greater strength of the fly. Fig. 12 shows how this wing is attached. When the hackle is adjusted, the wing is turned over towards the bend of the hook, and tied down. In either case the general appearance of the finished fly is as shown in Fig. 13.

Another method of tying both the body and wings of some of the larger imitations of the Ephemeridæ, is as shown in Fig. 14. In this fly it will be observed that the hackle is coiled around the body of the fly in six separate coils, as marked by the bands or ribbing of black silk thread. This is sometimes found to be very effective, and many anglers prefer nearly all their upright-winged lures dressed in this way. The supposition is that the tiny currents of water playing against the many fibers, give a struggling, caterpillar-like appearance, and I have no doubt this is so, and the cause of the fly's additional attractiveness. The wings in this fly are from the breast of the mallard, and are tied in so that they stand upright. Such a fly will float if dried in the air by waving the rod once or twice between casts, and this practice and style of fly is what constitutes on the clear chalk streams of England what is known as "dry-fly fishing." It is commonly very deadly there, but in my experience I have not found it so very successful in this country. A head, of a single strip of peacock herl, is usually tied on this species of May-fly, and as shown (Fig. 14) it adds to its *ensemble*.

The preceding flies are dressed or tied after the English methods which have prevailed from the time of the "Treatyse" of Dame Berners, until comparatively recent times, without more change than a

mere betterment of materials and workmanship. Even now in this progressive land the vast majority of flies exhibit little or no attempt at imitation of the natural insect. The flies are made to pattern but the patterns have been, with a small percentage of exceptions, imported long days syne with the Irish, or Scotch, or English emigrant fly-maker, and are in no sense representative of the insect life of American streams and lakes. It is true that occasionally is found some specimen of the caddis, stone, or May-flies, whose personality to the cosmopolitan angler is pleasantly familiar, but he turns in vain to his fly-book for even a colorable imitation. Take any or all of the lists of the dealers in fishing tackle, and it will be found that at least seventy-five per cent. of the names of the flies there given are of British origin. And in regard to their adaptability to the fly-fishing of this continent they are doubtless satisfactory, as far as they go. I have no word to say against them. May they live long and prosper. But is it not time that a determined effort was made by the apostles of the gentle craft to reform these conventionalized creations of the legion-name, and substitute some simpler and less confusing nomenclature, based on close study of the fly-food of trout and other fish, and an improved method of imitation? For many years I have labored with tongue and pen and example, to show that nothing short of an exact imitation of the natural fly, was logical, or worthy of the ideals of the true artist in fly-tying or in fly-fishing. But though there have been a few efforts in this direction, the results have mostly been imported from the other side where the exact imitation theory is now receiving its widest application. There are but few followers among us of an Aldam—who tied most beautifully to my certain knowledge every fly he used for many years—or a Halford, whose written works are proof of his genius as an artist in fly-making, and in this age of commercialism it seems almost impossible to recall the true Waltonian spirit, or revive æsthetic angling.

The nearest approach to the actual insect is indicated in Fig. 15, which is a simulacrum of the May-fly genera. As will be seen it approaches in outward conformation much more nearly to the real fly than the conventional "floating May-fly" (Fig.



Fig. 14.

CONVENTIONAL "MAY-FLY" BODIED "BUZZ."

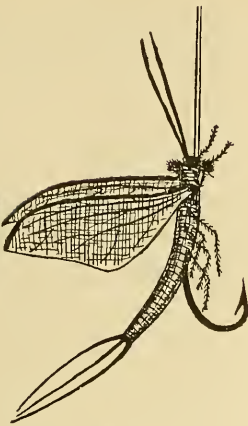


Fig. 15.

EXACT IMITATION "MAY-FLY."

14). The first of these capital attempts at exact imitation were made in London at least five years ago, and they instantly became notable. I had years before made similar flies, but from a lack of what I deemed the right material for the wings, had only advanced to the experimental stage. Nevertheless, those that I had made and tried had produced fine results, and bade fair to do better after they were evolved from the inceptive stage. The material of the body has been variously silk-worm gut, feather fiber wound round a core, straw ribbed with silk, silk floss, wool, mohair, rubber, either as a thread or band, or solid cylinder, and last, but as it seemed the best, a membrane which is detachable from the scales of some fishes of both marine and fresh water origin. I found the scale of the tarpon to yield this material bountifully, but it is nearly twenty years since I discovered the beautiful diaphanous skin of the underside of the scale of the common carp (*Cyprinus carpio*).

I regard the skin of the carp scale as one of the nearest approaches in texture to the soft and luscious bodies and wings of the nerve-winged flies. And, when it is made into flies, the trout seem to share my opinion. It is as transparent as crystal, but takes all tints from cold dyes or stains. When wet it is exceedingly pliable, and of unfailing resiliency. It softens in water immediately, and is one of the toughest and strongest membranes I know. It can be roughened, but cannot be torn, by the

teeth of the fish, and is practically indestructible. For the small flies this makes the beau ideal body, wound around bristle or a core of itself. Or it can of course, be wound round the shank of the hook, if, as in Fig. 15, a detached body be not required. The legs of a fly like this (Fig. 15), are made variously of silk thread, fibers of feathers, or the midribs of fine hackles, trimmed so as to show the tiny protruding stubs of the fibers. The antennæ are usually of feather fibers, and the head is a strip of ostrich or of peacock herl. The wings shown in Fig. 15 are of a fine fabric like bolting cloth, which has been water-proofed by a special oil preparation, and on which fibers of untwisted silk have been laid in imitation of the veining of the wing of the actual fly. This wing is, of course, cut in exact accordance with the shape of the nerve-winged insects and varies as they do. At the upper edge a fine midrib of a hackle is threaded through the fabric, which stiffens the wing and prevents its collapse when in use. The setæ are three fibers of feather, and should be of the softest and silkiest kind. The only fault with this fly seems to be, that the wing itself is too crisp and harsh in texture. It does not soften in the water to any appreciable extent, and I need hardly say that unless trout are ravenous, this is a fault of some gravity. The improvement lies in the use of a more ductile material, which ought to be easily found by some textile expert who is also a fly-fisher. The scale wing is not



Fig. 16.

EXACT IMITATION "CADDIS-FLY."

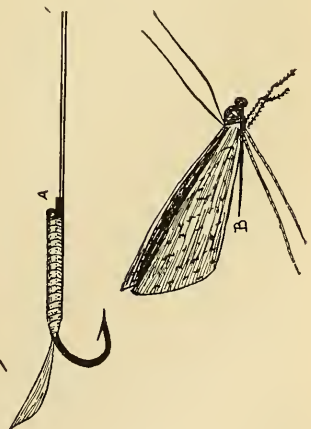


Fig. 17.

DETAILS OF INTERCHANGEABLE FLY.

suitable for large flies, but for small creations it is supreme, in that it has the requisite ductibility, and can be tinted to any shade, and even lined or veined with a pen. I have fitted it admirably to flies for sea and bay fishing in Florida by leaving a portion of the calcareous part of the scale on the upper edge of the wing, but the effect is not entirely pleasing, though the fly is well adapted for that kind of fishing because of its durability. *Apropos* of one of these flies I find in my note book the following from Dr. George Trowbridge, writing from Sarasota, Fla., March 4, 1895, "The fly with red tail, scale covered body, yellow legs, and double scale wings, has made the following score: February 22, four sea trout, one skipjack; February 23, six sea trout, one channel bass of seventeen pounds, this probably the largest channel bass taken on the fly by any one; February 24, eleven sea trout; February 25, nine sea trout, one cavaille, one grouper, one rockfish. While lifting a small sea trout into my boat not using a landing net, the old and frayed leader broke so I cannot return the fly." It seems that this speaks eloquently for the durability and attractiveness of the scale membrane fly. Thirty-five large fish, including a seventeen pounder, should be quite enough for one fly to capture.

In Fig. 16 I suggest a type of close imitation of the down-winged or caddis-flies. Pretty much the same style will serve for the stone-flies also. In this case the body is of cork, or of feather fiber, ribbed with silk and placed on a core, which I usually in large flies, make out of a piece of rolled tin-foil. This gives the fly weight to sink, which with the caddis-flies is sometimes an advantage not to be lightly disregarded. The legs are of feather fiber, as are the antennæ, and the setæ, if the latter be necessary. The wings are of any good feather reversed as in Fig. 12, and I leave it to the impartial lay reader, if the imitation is not a good one, of hundreds of "bugs" he has promiscuously encountered. Of course there should be many varieties of flies beyond the few I have described, but my purpose is suggestive, not conclusive, and if I have stimulated any to think out this matter of fly imitation and simplification for themselves, I shall be amply rewarded. Every fisherman worthy the name knows that there are not more than a few dozens of flies he would tie to for all his angling ca-

reer, whereas the species on the market run into the thousands of patterns. What is the use of trying to learn them all? Life is too short! Seventy-five per cent. are useless, except when one has nothing else.

For the capricious black bass, I am willing to concede there is no certainty of imitation possible. As far as I know, he does not feed on any fly that has assumed the imago stage. He will gobble the immature dragon-fly as it reaches the surface of the water, and do the same with other psued-imagos of similar type. But when he is taking these he will take an artificial fly either under or on the water, and, if the color and form suit him, he will rush on it like a lion on its prey. I would not dream of imitating dainty ephemera for him. His nature is far too brutish.

But he is sometimes very fastidious—though we know not why, and it is well to have a variety of alternatives, in the color, at least, of the flies wherewith you would tempt his fiery red eye. To simplify the matter I devised for my own use some ten years ago, an interchangeable fly of which Fig. 17 shows the details. A and B are separate parts and, of course, are made very securely. A represents the body of a fly in which is placed above the shank of the hook a little silver or other metal tube. I use silver because it does not rust, but a small roll of quill, or celluloid will do very well. The fastenings outside the tube are made so that the opening of the tube is of easy access. B is a common black-headed steel pin, and to this the wings and legs or hackle are attached in the ordinary way. The utility of the invention is obvious. A dozen of these flies, each section differing, represents one hundred and forty-four changes of fly, or to put it simply: one dozen of these is equal to one gross of the ordinary fly. All one has to do is to insert the pin in the orifice of the tube and cast away. The passage of the fly through the air maintains the parts in connection, and, of course, they are made to fit tight also. I never had a fish in his struggles throw the pin out, though if he did that might be a slight objection. The device, in my, and other, hands has proved a grand success.

In the foregoing I have thought to be plain, precise, and practical, and have not broached any high-flown or far-fetched theories, nor have I used technicalities which would confuse the neophyte.

THE CARIBOU AND ITS HOME

By Andrew J. Stone

CONSIDERABLE has been written of the caribou, but most of the country occupied by them is extremely inaccessible and very difficult of travel, and thus we can readily understand that the majority of the writers have preferred to rely upon the investigations of the very few who have visited their country, rather than suffer the exasperations of travel necessary to study the animal from life. Therefore, our knowledge of them has advanced slowly, for the writer who gathers his material from the work of others can add but little real value to the subject, and both he and the artist often fail to correctly interpret the description and exact meaning given by the writer or naturalist who makes the observations in the field, and in no small way they divert the real meaning of original matter into widely different channels to those intended.

The number of species of caribou is not known, nor will they be known until a complete canvass of the territory inhabited by them is made in a thorough and systematic manner. The classification of the different species, with the range of each, would be a great and valuable work. But if such a work is to be crowned with the best results, it cannot be prosecuted at too early a period; for, I regret to say, I cannot see in the future of the north the same bright prospects for the continued existence of the caribou that there is for the moose; for the caribou, the grandest of our wild animals, is doomed. It is not constituted to so well elude its pursuers and survive its enemies as the moose. The country occupied by them is so very large, the distances are so great and the means of travel are so inadequate, that the task of properly tracing their distribution and relationship is a gigantic one.

They inhabit the woodlands, the vast barren plains and the most desolate rock-bestrewn mountain tops at all times of the year. The general impression is that they quit the barren plains in the far north in the autumn and travel south until they

reach the timber. This is true only to a degree. Great droves of them do then leave the Arctic coast for the south, returning to the north coast every spring, and these migrations occur both from the region west of the Mackenzie as well as in the region east of that river, although the herds of these two regions never intermingle or come in contact with each other in any way; but vast numbers never leave the coast.

During my winter travel of many miles of the coast I saw bands of almost all sizes up to fifty in number, and we were constantly running across bands of them in certain stretches of that country, although in other long reaches no sign of animal life of any kind would be visible.

One would naturally suppose that the instincts of any one species of the same animals would be similar; but such seems not the case with the caribou.

During three years of almost continuous travel in the north, I have visited more of the country of the caribou than, perhaps, any living man; my observations of them have extended through all their habitats on the mainland (North America), and have been conducted at all seasons of the year, giving me the opportunity to observe them under all the conditions to which they are subject.

The caribou occupy the largest range of any of the deer family, for they are found more or less in all of northern North America, north of 48 degrees N. L., and the islands to the north and east of the mainland of North America, including Greenland. Not only does their range extend almost as far north as any land goes, but in the mainland of America it extends from the most easterly extremities of Labrador to the western extremities of the Alaskan peninsula, through one hundred and ten degrees of longitude.

In size they vary according to species, from about that of the common Virginia deer to almost or quite that of the elk or

wapiti. In my judgment there are at least three varieties of the caribou.

The females of many of the most northerly herds go to the Arctic coast to calve, reaching there in May. On the 12th of May, while skirting the west shore of Franklin Bay, I sighted a herd of about twenty-five on the sloping mountain inland. By the aid of glasses I could make them out to be a bunch of females with some of the calves of the preceding year; they were traveling northward pretty nearly in single file, with a fair pace, and were among the advance guard to reach the coast. The land was yet covered deep with snow, necessitating their pawing for food, as in mid-winter.

When these herds reach the coast, the long points of land extending far out into the sea are their favorite feeding grounds, for during the summer they are freer from the ravages of the mosquitoes than further inland. To rid themselves from these awful pests they are often known to take to the sand spits and even plunge into the water.

Caribou are stockier of build than the common deer, with heavier limbs, broader hoofs and very much larger dew claws. Their ankles are very flexible, and when walking, their large, flat feet and dew claws spread out, aiding them materially in traveling over partially packed snow, or spongy moss beds; the broad hoof maintains its width well to the point, the cleft between the toes extending far up and enabling the foot to spread so as to give a large bearing surface. The hind or accessory hoofs are of real use; these are larger than on any other quadruped of its size, and add greatly to the bearing surface. They are the only members of the deer family using their dew claws in this manner. Their antlers grow long, like those of the elk, with round shafts at the base, but palmated near the ends, with almost always one or two such tines growing down over the face.

Many people believe that nature provides them with these antlers for the purpose of scooping the snow off their feed in winter, but this is not the case, for the males shed their antlers in December, just about the time they would begin to need them for such a purpose. They paw the snow from off the moss with their broad, flat hoofs. The female caribou are the

only females of the deer family in America to wear antlers, which they, and some of the very young males, shed from April till June, varying with climatic conditions and their general health and age.

The antlers of the smaller varieties of caribou that inhabit the barren Arctic regions are quite as long as those of the larger varieties, but are of much more delicate mold. The antlers of the *Rangifer montanus*, or Mountain caribou, are massive and heavy, in keeping with the size of the animal; and those of the Woodland caribou of Maine and New Brunswick are in size and weight between the two.

There are well-marked differences in color, but long experience among, and careful study of the caribou, teaches one to handle the subject of color with care. In general, they are dark over the back and sides, and on the outside of the legs, shading from tawny and reddish browns to almost black. They are lighter about the neck and head and on the belly and on the inside of the legs, and in some species white on some of these parts. The character of the coloring is not only varied among different species, but also varies with the seasons, with animals of different ages and sexes, and even among animals of the same age and sex in the same herd.

I have seen in one small herd a very surprising divergence in color. Females are generally lighter than adult males. Caribou calves are lighter in color than adults; the shading of red is not so even over the body as that of a moose calf, being lighter on the lower flanks and on the belly and legs, and it always lacks the dark dorsal stripe of the moose calf.

Caribou and moose calves are both small when first born, the moose calf being especially small in proportion to the size of the parents; but the calves of both grow very rapidly, far more rapidly than a domestic calf, in proportion to the size of the matured parents.

The coat of the caribou is shed between the middle of June and the middle of August, and is influenced by the same conditions that govern the shedding of the antlers—its general health and state of flesh. Healthy animals in good flesh are always first to shed.

Caribou do not leap in running, more than perhaps for two or three jumps when suddenly alarmed; its fastest gait



"CARIBOU OCCUPY THE LARGEST RANGE OF ANY OF THE DEER FAMILY."

is a trot, and its speed is greater than that of the common dog. They are great swimmers and never hesitate at wide streams or lakes, even for distances of two or three miles.

My efforts, outside of an extended general knowledge obtained of these animals, were rewarded in securing a fine series of specimens of an entirely new species from the Cassiar Mountains, Northwest British Columbia, the largest and most handsome animal of any of the caribou yet described. This new variety discovered by me, a report of which has been made in detail to the Zoölogical Department of the American Museum of Natural History, are almost or quite as large as the elk; they are twice the size of the Woodland caribou, and range in the mountains above timber line. The Cassiar Mountains of Northwest British Columbia are the heart of their range.

The mighty Mackenzie River forms throughout its entire length a well-defined dividing line between eastern and western herds; in fact, at most points this dividing line is a broad belt of country, in places more than one hundred miles wide. The herds that reach the Arctic coast in the spring never approach each other nearer than seventy-five miles, and rarely so near as that. To the south and north of Bear River and Great Bear Lake there is a large caribou which I believe to be different from any other mentioned here, and my reason for this belief is in the fact that they are entirely separated from the herds of *Rangifer montanus* to the west, and the skins of them I saw exhibited white on the inside of the legs and belly—which the Mountain caribou or *Rangifer montanus* do not have. A large form is also found in the Rockies west of the Mackenzie, which ranges north well into the headwaters of the Peel River. Again, to the north of the Porcupine and in the regions of the headwaters of the Koyukuk, Noatak, Kewak and Colville Rivers we also heard of large caribou.

Much of the evidence which I collected from Loucheaux Indians and from the Hudson Bay Company's traders, who were once stationed on the Porcupine, indicates that there once existed a variety of caribou in these last-named regions that may now be extinct. The traders told me that they had not seen any of the

skins of these animals for twenty-five years. However, the headwater regions of these rivers is a very large country. These animals were described to me by both Indians and traders as being red in color, and were the only caribou ever described to me as being of that color.

In classifying the real value of wild animals there is but one feature to take into consideration, and that is the actual amount to which they contribute to the general welfare. It is remarkable to note that the caribou, enduring the rigors of the severest Arctic winters, living and feeding on the bald ridges and open plain on moss and lichens, unprotected from the elements of storm in any way, sustains thousands of lives in Arctic and sub-Arctic America every year.

The Indians want no better food, and between them and their dogs, but little of the caribou goes to waste. They even consume the stomach, and the undigested contents of the stomach, mixed with the blood, and boiled, is considered a delicacy; every ounce of marrow contained in the bones is consumed, and I have seen them roast and eat the eyes and the sinews of the legs with a relish; whilst the nose is considered the real prize.

The skins provide the best of clothing all the way from head to foot. The sinews from the loins supply the women with thread with which all their sewing is done, and from the skins they make rawhide lashings for sleds, dog harness and webbing for snow-shoes. No other animal so completely furnishes all the requirements of a people. No other wild animal in America provides so many people with food, clothing, a home and its furnishings, as the caribou. Even its bones are made into tools by these people, and at one time furnished them nearly all the implements they used. Not only have they supplied the inland native with food and clothing, but they have, and do to-day, supply nearly all the north coast Eskimo with clothing.

Inland from Darnley Bay, and on Parry, Bathurst and Dalhousie Peninsulas, the old stone mounds are yet in place where the Eskimo formerly drove and impounded the caribou, slaughtering them with bow and arrow; and to the west of the Mackenzie delta, in the Rat River and Porcupine River countries, may be found

the decaying brush fences between which the Loucheaux tribes of Indians at one time, not very long ago, drove the caribou into rawhide snares set for them, thus securing them in large numbers. In the lake regions east of the Mackenzie the natives often surround and drive them into lakes during summer and autumn, and then slaughter them from their canoes, with knives, axes and clubs.

The actions of the different varieties of caribou are often very dissimilar under the same circumstances. The large Mountain caribou will generally head straight away, but sometimes circle around the hunter for a short distance, carrying themselves in a dignified manner, moving with powerful, rapid strides, the movement of their legs being directly forward in a line with their body and very regular. The caribou of the coast will circle the hunter repeatedly, until they get wind of him, when they are off; but in running this circle, I may add that their judgment as to the distance a rifle-ball will carry is exceedingly good. While thus moving around I have often been amused at the manner in which they carry one hind leg. A novice in the hunting field, after having fired a shot in their direction, would think he had broken a leg of every member of the herd.

The destruction of caribou is vastly greater among those that visit the coast than among the larger caribou farther south. The large whaling fleets in Behring Straits, and as far north as Point Barrow, have created a demand for the flesh, and slaughter by the thousands has resulted. This demand has now been extended by the whalers as far east as Cape Parry.

One winter fifteen vessels wintered at Herschel Island, west of the mouth of the Mackenzie, and I am reliably informed that each vessel used from 10,000 to 20,000 pounds of caribou meat, an aggregate of over 300,000 pounds in one winter, principally the saddles. At the head of Franklin Bay, in the winter of 1897-'98, four ships used about 90,000 pounds, and at Cape Bathurst, in 1898-'99, one vessel used over 40,000 pounds.

The Eskimo hunters and their dogs must live during the hunt, and this means the killing of twice or three times the

amount of meat that reaches the ships. A few years ago the sleds from Herschel Island picked up all their meat within fifteen to twenty miles of the coast of the mainland. In the winter of 1898-'99 they were compelled to go from one hundred and fifty to two hundred miles in order to secure meat for the crew of one ship.

We may very clearly infer from this that it is not the presence of the modern rifle alone, nor is it the sporting proclivities of our Eskimo, as stated by a previous writer, that exterminates these animals, but the demand of the white man, who offers in trade for the meat thus obtained, tea, tobacco, molasses and calico.

If a chart were made indicating the geographical positions necessary to reach in order that we might thoroughly know the different species and their distribution, some of the positions would be very close together, and others widely separated.

There is much to be learned of the caribou, and the knowledge may only be acquired by specimens and data from New Brunswick, Southern British Columbia, the Cassiar Mountains of Northwest British Columbia, the hilly country of the Kenai Peninsula just inside the western limits of tree growth, the Alaskan Peninsula completely beyond the western limits of tree growth, and a country whose temperature is decidedly influenced by the Japan current; in the high Alaskan mountains of the great interior south of Yukon, the source of many large streams that flow in every direction; from the Arctic coast east and west of the Mackenzie; from the mountains at the headwaters of the Peel River, south and north of the Bear River; from the northeastern extremities of the continent, and from Greenland and Labrador. There is nothing impracticable or impossible in the conducting of such extended research, and, in connection with other branches of scientific work, it would be highly commendable and richly repay all labor and expense.

A complete series of specimens, with all necessary data, from each of these localities, would revolutionize all popular theories concerning the caribou, and would lead to a complete revision of most of the present literature pertaining to them.

DIVING FOR TURTLES

By Charles Frederick Holder

WHETHER it was the ill concealed smile of incredulity on the face of Long John, my boatman, or the rashness of over confidence I know not, but I had announced that I was going to take a big green turtle, single handed, on the outer reef, and the statement had aroused no little interest among the fishermen, wreckers and Conchs, who made up the little settlement on Long Key.

It was April and intense heat—the advance guard of the long summer—was beginning to be felt; yet the days were perfect. The islands—a dozen or more—seemed like emeralds in settings of silver, resting on an azure sea of glass. Not a ripple would be seen save that made by the fin of some vagrant shark; not a sound broke the stillness, except the occasional “*ha-ha*” of the laughing gull, and the musical and distant roar of the waves as they piled in upon the outer reef. The air of early morning was cool and delicious, and as the sun came up, suffusing the eastern sky with long vermilion streamers, Long John would shove off his dinghy, and with myself as companion, scull out into the great lagoon, which formed the central field of the growing atoll; and search for turtles or the large and gamy barracuda, both of which we took with the grains.

Long John was well named. Nearly seven feet in height, thin as the conventional rail, angular as a manzanita tree, his face fiery red, from the combined results of Bacchus and the sun god, he was a landmark; and standing in the dinghy, slowly sculling, his long grains-pole in hand, his small gray eyes fixed ahead, he looked from a distance like the mast of the boat; indeed, it was said on the reef that once when out with his mate, Bob Rand, he stood up, and stretching his arms wide apart as yards boomed out a big foresail which sailed the craft into port. Long John's method of taking turtles, both the green and loggerhead, was to peg them; the weapon a three-sided peg (cut from the tip of a file and

polished) which fitted into the long pole, or handle, and was held in place by a long cord.

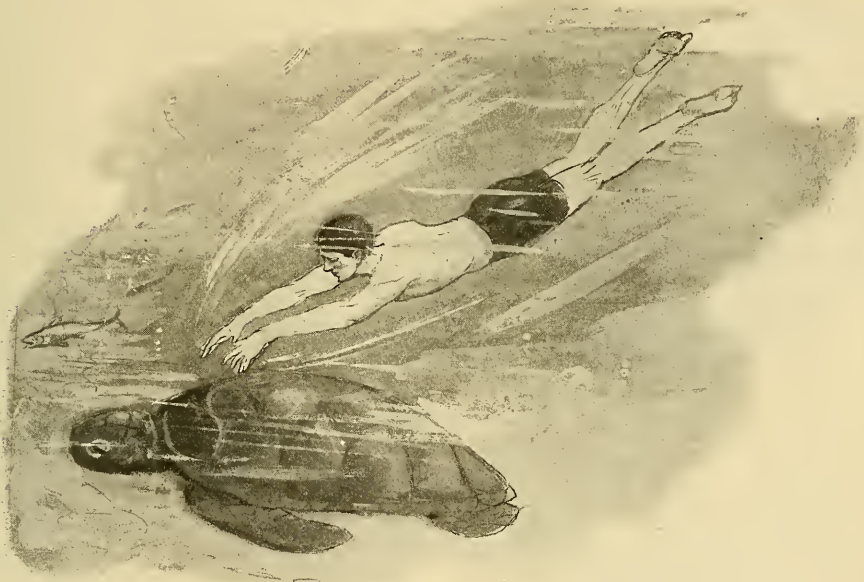
At this season of the year the turtles were found feeding on the lagoon bottom, and often asleep, when it was comparatively easy to approach them; for when alarmed they invariably rose to the surface to breathe before making off. At that time the peg of my companion would reach them, the long pole trembling through the air like a living thing. In the early days of these trips, during my novitiate on the reef, my station was in the bow of the dinghy, where I could readily see the black forms of the turtles lying in water but six or eight feet deep—a striking contrast to the white sandy floor of the lagoon. Often John would scull the boat within six feet of them before they awoke. It was this circumstance which led me into deep waters. I believed that if the dinghy could be brought within fifteen feet of a sleeping turtle I could slip overboard, and by diving, swim up behind, grasp the victim and wear it out in the shallow lagoon.

“How long kin you stay under watah, sah? I reckon it all depends on that,” said Long John, and he reckoned further that if I could stay there twenty minutes it might be done. Bob Rand, another indisputable authority, reckoned that a big loggerhead would reach around and bite off my arm, and regaled me with the exciting incident of a battle royal which he had witnessed between a shark and a turtle, in which the latter was the conqueror. Contrary to their expectations, all this only increased my desire to make an attempt, and, finally, the two fishermen agreed to aid me in what might be considered a training for the event. In a word, we were first to go on what, on the reef, was termed a turtle turn. The game was to be turned, then placed in a “crawl” where I could, as Bob expressed it, “get my hand in” for the attempt on the open reef and sea.

All this was alluring, and the first

moonlight night found us crossing the channel between Garden Key and Loggerhead, the twelve-oared barge propelled by a black crew whose songs and laughter went rolling over the still waters, despite Long John's warning that it would frighten every turtle off the reef. The moon was just rising, the Southern Cross set in brilliants in the south, as the boat slid into the soft sand of Loggerhead. As we tumbled out the boys hauled the barge above high-water mark, after which Long John called the crew together and apportioned them off. Sam Pinckney was to take the point; Paublo the bite; Dave

To cover the entire beach the men were stationed along shore, two hundred yards or so apart, where they were supposed to lie concealed, either in the bush or in depressions in the sand. Every half hour they were to walk quietly down to the water's edge and then run rapidly along to the next station, watching out for tracks that led upwards. In this way every foot of the shore was covered. The position Long John had selected was in the lee of the south point of the key, where the gentle waves came purring up the beach in little eddies. The track of the moon on the water was a blaze of silver, reaching



THE DIVER'S APPROACH.

King next, by the cactus patch, while Tom Mallory was to go right across the island, and Scope down by Crab Point; and so on until the beach of the long isle of sand, with its bay cedar and cactus topping, was laid out into districts, each in charge of a "boy." Long John and I took our station two hundred yards down the beach, and here, in low tones, he gave me the details of turtle turning. The animals would begin to appear as soon as the moon rose, come slowly ashore, and deposit their eggs, in a hole above tide water, after which they would return to the water by a different route.

far away, in which the splashing and leaping of large fish could be occasionally seen. The stillness was almost absolute. Now and then came the weird cry of a wandering tern, or the scrambling sound of the purple land crabs as they climbed the low bushes. Finally I heard a mysterious sound on the sand, and in the bright moonlight made out scores of almost pure white spirit crabs, perched on high legs, standing around us, evidently holding a conference as to what we were. At the slightest movement they would dash away in a wild scurry and reach their holes; then when all was again quiet they would

come pouring out to resume their observations.

I was lying in a depression in the soft sand watching these ghostly marauders, who seemed to be undecided whether to attack us or no, when Long John, who had been looking up and down the beach, gave a slight click and touched my arm, pointing to the sea. There, right in the path of the moon, half in the water, half out, its back gleaming and glistening, was a huge turtle. It was looking the situation over and perchance had a suspicion that something was wrong. It remained in the same



THE FIRST RUSH UPWARD AFTER GRASPING.

position four or five minutes, with its head raised as though listening, then seemingly satisfied, it came crawling laboriously upward. It was headed directly for us, coming on slowly but surely, and in a few minutes it was twenty feet from the water. Long John did not move, waiting until the unsuspecting turtle was within ten feet of us. We sprang at it, and as I reached its side I was amazed at its size—the veritable king of the loggerheads, its back broad enough to hold three men standing, its huge head and jaws showing plainly, while its long and ponderous flippers gave it the appearance of extraordinary width. As we suddenly appeared the turtle swung seaward, whirling the sand in all directions in the violence of its rush. John grasped the shell between the flippers and gave an heroic lift, while I, missing my grasp, received a volley of sand from the whistling flippers and fell upon my side.

“Get in front,” cried Long John, who, unable to make the turn single handed had swung himself upon the back of the frightened animal and was endeavoring to stop it by thrusting his feet into the sand. But to get in front and stay there were two different propositions. To face the ugly head and horny jaws of the great animal, without a weapon, was not to my taste, so after vainly resisting its charge I fell back, and both of us grasped it by the side and lifted. Up it came a foot, and then another, Long John shouting all the nautical epithets of encouragement and invective he could think of; but the moment the turtle’s flippers were clear of the sand they came whistling through the air, striking me such a staggering blow on the side of the face that I lost my hold and fell against my companion, and down went the turtle. Again we seized it, and with a rush endeavored to turn it; but despite all our attempts the animal fell back and struggled on in the direction of the sea.

It was evidently too much of a lift for us, so Long John ran along the beach, returning with an oar just as the turtle was carrying me upon its back into the water. He stopped it for a moment by striking it upon its head, then, running the oar beneath it, we both took

hold of the lever and with a shout had the monster upon its side; a moment later it was sprawling and helpless on its back, beating its armored breast with its powerful flippers in impotent rage, snapping at the oar and crushing the hard wood.

“I’ve turned heaps of turtle here and over yander, sah,” said Long John, “but that’s the onerest one of the lot. I reckon it weighs fifteen hundred pounds.”

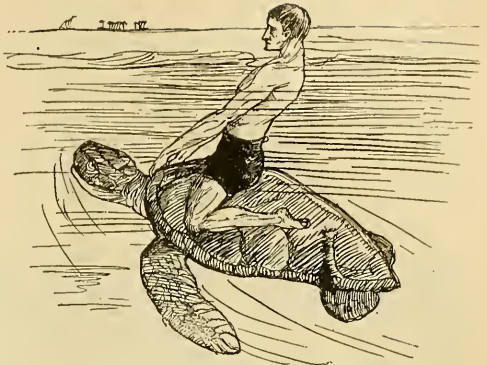
The animal was so heavy that we could not haul it out of the water, and as the tide was coming in John started for the next station and brought back two men. The turtle was, with their help, then hauled up the beach where Long John lashed the flippers, each side together, with rope yarn by the simple expedient of cutting holes through the flesh with his knife. Our game was as vicious a specimen as ever came under my observation in many later experiences. Its enormous head had a

particularly ugly expression; its large eyes were sunken, watery and bloodshot, and when turned slightly in the direction of its captors had a disagreeable menace. As I looked it over I came to the conclusion that an attempt to hold an animal of that size in the open water must fail.

In the course of the night, seven or eight other turtles were taken. I had a hand in three of these turns, losing one turtle, which I ran across about five feet from the water. It turned with remarkable celerity, and though I lifted and threw myself upon its back holding tight, it carried me down to the water's edge and into it, where I was forced to release it, to the amusement of the boys who came up in time to witness my discomfiture. In the morning the boat was rowed round and loaded with the spoil.

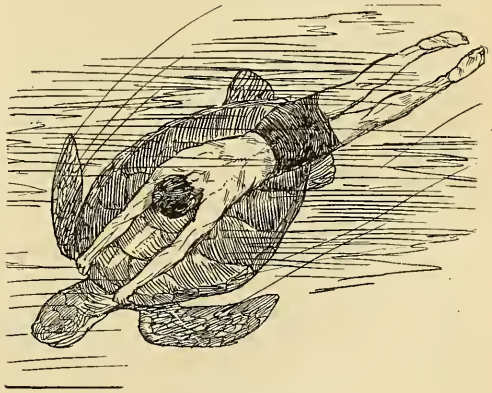
Turtle turning, except when the animal is a very large one, is a clever trick. Some of the men could topple one over with the greatest ease, completely escaping the flying flippers. What was known as the turtle corral, or "crawl," as the boys termed it, was an enclosure nearly half a mile long and about sixty feet wide, varying in depth from six to eight feet; the tide rising and falling through a gate which led to the open sea. Into this the turtles were liberated to fatten and await execution; turtle meat being the beef of this remote and out-of-the-way corner of the world. The laying time of the turtles was the harvest, and three islands of the group upon which the animals were found, were patrolled with more or less regularity, and with such success that in three weeks forty or fifty turtles of the green and loggerhead persuasion were confined in the corral; which was so extensive that they might as well, so far as personal comfort was concerned, have been in the open sea. In walking around the wall they could be seen dotting the white sandy bottom, singly and in groups, occasionally rising to the surface to breathe and uttering a loud hiss, then dropping down to the bottom to sleep.

One morning I determined to make the attempt to take a turtle, single handed, and having incautiously given it out to Long John, I found a small but enthusiastic crowd at the tide gate awaiting me. There was no time lost in hunting; the game was plentiful, and the bottom dotted everywhere with the big black forms; yet as I slipped quietly into the water, near the tide gate, I felt that the most difficult part of



BRINGING HIM TO THE SURFACE.

my training for the *grand prix* of the outer reef was yet to come. I had located a large green turtle, which was lying in the center of the "crawl," in about eight feet of water, and slowly and carefully swam toward it. When about fifteen feet from it, I dropped under water, sank to the bottom, and swam rapidly toward the animal. The water was very clear, and in a few seconds I sighted the game lying flat, its flippers extended, its head resting on the sand, to all intents and purposes apparently asleep. A few strokes brought me directly over it, then I quickly grasped the big creature with both hands, by the projecting shell just over the head. What happened during the succeeding seconds left a very indistinct impression. I remember seeing the big head rise, the flippers strike the bottom, and in a cloud of sand and rushing water, I felt myself jerked to the surface with irresistible force; then I was dragged down again and away, on the back of as wild a steed as one would wish to mount on land or sea.



DOWN AFTER BREATHING.

The turtle in its alarm had instinctively dashed to the surface to breathe, then plunged down, with perhaps an undefined idea of washing me off. The remark of Long John that I might win if I could remain under water twenty minutes flashed through my mind, and I was fast giving out when the turtle rose again to blow. In reality it had dragged me only about fifty feet, but, so rapid was the rate against the water, that it increased the necessity for breathing. At the time, I believe I could remain under water about one minute under normal conditions, which were now certainly reversed. I allowed myself to stretch out perfectly straight at first, thus aiding my steed, which was now flying along like a bird, and for a second time I was threatened with suffocation. I could feel the veins in my head swelling, my eyes seemed ready to start from my head, and I was about to release my hold when it occurred to me to try and stop the animal. Acting on the idea, I drew up my knees and secured a position, which if the turtle had been on land would have been a kneeling one. This brought my body directly against the rushing water. The effect upon the turtle was instantaneous; my changed position deflected its head upward, and out of the water we came, I gasping for wind, the turtle uttering a loud snort. As it plunged down again, I heard the shouts of the men on the wall, caught a "bravo!" from some one, and realized that I had accidentally solved the secret of turtle riding. So no sooner did the animal dive and carry me to the bottom, than I immediately brought it up by kneeling on its shell. But the turtle did not surrender at once. It swam on the surface when it could not dive, plunged downward, and turned on its side, endeavoring to wash me off; but by continually using my body as a brake, I succeeded, after a run of perhaps five hundred feet, in reducing my fiery steed to terms. I turned it in the direction of shallow water, and finally gaining my feet, held it. The big animal had lost its wind, literally.

After some weeks of this sport I assumed that I was an expert in riding turtles, and was more than confident that I could take one on the outer reef. So one day Long John and I pushed off and sculled over to

the lagoon, looking for a victim. The lagoon was cut in its very center by a deep channel, as blue as sapphire—a veritable gem of the sea, which wound in and out in a mysterious fashion; its sides so steep and precipitous that, standing on the edge in six or eight feet of water, one could look directly down into the blue depths. We crossed this and presently sighted a turtle, perhaps one hundred feet from the edge. I immediately slipped overboard, and Long John, locating the position of the animal, carefully approached it from behind. It was fast asleep, and when within reaching distance I dived, while Long John backed away. I drew near with the greatest caution, swimming low and deep, then, when directly over it, I seized it, pressing my knees upon the shell. The same convulsive rush to the surface followed, as on previous occasions, but this steed had never been turned, had never felt a grasp upon its shell, and the force of its plunge and rush was sufficient to loosen my hold. By good luck, more than anything else, however, I succeeded in retaining my grasp, though it was impossible to keep my knees on the shell, and the turtle towed me along, stretched at full length, at racehorse speed. It would dash to the surface, bringing its own and my head out of water, plunge down again, then, as though exhausted, sweep up, turning and tipping in a vain effort to rid itself of its unknown and mysterious enemy.

The turtle had carried me down four or five times in its wild rush, and towed me some distance from the boat, in shallow water, when I heard Long John shout something. I could not make out the words, but the next moment I realized their import, as the turtle plunged over the edge of the reef and dived into the deep blue waters of the channel. I made a desperate effort to stop it, but the turtle scented liberty from afar, and plunged down deeper and deeper. I retained my hold until I experienced intensely cold water, perhaps fifteen feet from the surface, then cast off, and swam upward, to be picked up by my solemn-visaged boatman with the remark, "It's jest as I tole you, sah; if you ken stay down yander for twenty minutes, you kin do it." But I could not retain my breath twenty minutes. There are, unfortunately, limitations to this sport on the outer reef.

FOREST FABLES

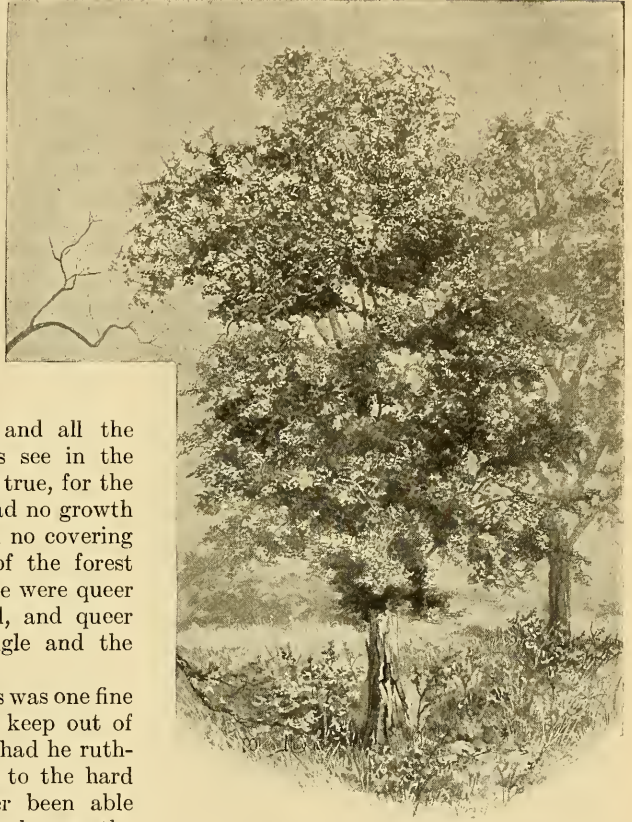
By Aloysius Coll

I. THE TRANSFIGURATION OF THE SHELLBARK

A LONG time ago an army of tall trees stood upon a hill-side. Not a crook was there in any one of them. Like hewn pikes they reached up to the clouds, and touched their sharp tips to the maze of the blue sky. Upon their sides there was not a rough spot, and never a fungus dared fasten his fingers into the smooth bark. It may seem strange that these trees were at that time the ancestors of the shellbark, which all the children and all the squirrels, and all the hunters see in the woodland to-day. But this is true, for the forefathers of the shellbark had no growth of rough bark upon them, and no covering where the little playfellows of the forest now cling and scamper. Those were queer days, it must be remembered, and queer people held forth in the jungle and the wood.

And among this army of trees was one fine tall brother, who never could keep out of mischief. Many a bird's nest had he ruthlessly dashed out of his arms to the hard ground. No animal had ever been able to climb his slippery sides, and even the crows tilted and swayed in peril when they tried to hold onto his twigs and boughs. And all this mightily pleased the shellbark. His humor was touched at the trouble of the birds, and he shook his leaves in glee. He was a brave tree, too, and had never feared the uprooting storm or the fierce gale. He called them "the kisses of the winds," and taunted the summer because it could not tear a single leaf from his arms and hands.

And it was not an idle boast, because every leaf clung tightly, and the shellbark had cause to congratulate himself, inasmuch as he had even defied the blight of



the lightning. This had happened many years before the time I am now speaking of. The summer was exceedingly angry at the shellbark; his wind had uprooted a tree, a brother tree, and was hurling it to the ground, when the tall shellbark caught it in his arms and for many years held it, like a child is held in the arms of its mother. And so one day the summer talked to the thunder about the proud shellbark, and asked him how he might be torn from the face of the world and crumbled into dust.

"Well," said the thunder, in a deep

voice, full as the double beat of a bass drum close to the ear, "I have a hot tongue which sometimes I stick out in fury, and wherever it touches, there is ruin and desolation. Now, I could speak with this red tongue to the tree, and I think he would roll over, as dead and as silent forever as that rock by the ledge; but, dear summer, why don't you cease to give him warmth? Why don't you stop the dews from falling upon him, and hold the silver rain from his rootlets? Starve him to death."

"Capital idea!" said the summer in delight. For you know the spirit of the summer is often tinged with vengeance. Everybody has seen the withered prairie and the scorched desert, the wilted flowers and the shriveling trees by the wayside, under the hot anger of the sunshine.

And so the summer tried to stop the dews, and held back the rain. But brother trees sent out their rootlets hidden under the ground to the tall shellbark, for it must be remembered he was a favorite in the forest, because he had saved a falling brother. And the brother rootlets clung to the rootlets of the tall old tree whom the summer was persecuting, and he only grew the stronger and looked the greener with the aid given him secretly. All the time the summer never knew whence the new life came, and in sore distress grew weary with the struggle and allowed the sunshine and the silver rain to fall again upon the stubborn tree. The summer was a little proud, you see, over the tall shellbark, because it showed the best that is in the life of the world and the heart of nature.

But the summer did not say anything to the thunder, and when the silver rain fell, the thunder leaped out with a loud voice, thinking his chance had come to hurl his vengeance upon the enemy of his friend. And so the red tongue of the lightning came down with a splitting scream. High above the top branches of the forest stood the pinnacle of the old shellbark. With a burning light the shaft slid upon it out of the air, powerful as the blow of two worlds rushing together in blindness.

But the old shellbark only shook his leaves a little, as a child shakes its finger when burned, and trembled a moment in fright, for you see the old shellbark had a slippery side then, and the lightning did

no more than glance to the wet ground harmless, except for one gash down the smooth bark. No wonder the old shellbark laughs at the storm now, and is proud of his station in the wood, for he has heard the lightning never again will strike in the same place!

Now, all these things are told, not because they have anything to do with this story, but because it is not easy to make anybody believe that the shellbark ever had smooth sides, without reciting some of his experiences before the rough coat was given him in such a funny way. And this is the story of the giving of the funny coat.

Being very humorously inclined, the shellbark had often coaxed the little squirrels to try to climb up his smooth sides, but none could do it. Only the birds perched on his shoulder, and they went up on their wings. And one day the old tree heard a squirrel and a coon arguing the question as to which of the two was the better climber.

"Now, children, don't quarrel over the matter," began the sly old tree, with a scarcely concealed chuckle that tingled clear down to his roots. "I know you are both fine climbers. I saw Mr. Raccoon go up the chestnut tree over there the other day, like that streak of lightning once came down me, and the performance was worth repeating. And I also have seen Mr. Squirrel shoot up the old oak trunk as a bird flies to its nest. But, children, there is one test remaining. Why not have a try at my smooth sides? No squirrel, or squirrel's brother, has ever gone up this slippery length of mine, nor has any raccoon even attempted it. So line up for a race to the top of my head! But, no; wait till I see. It will be proper to have here some of your brothers and sisters of the animal family, so that all may witness the trial of speed and agility, in order that the winner may not overstate his victory and the loser may not lie of his defeat. Call in Mr. Possum, and Mr. Fox, and Mr. Rabbit, and let old foggy Crow take a seat up near the finish line. Mr. Snake can be the starting tape at the foot of my trunk, and must tell when one or the other of you makes a false start and leaps across him before the time. And Mr. Woodchuck can take you both up the slope a little way and arrange the details for you and tell you the rules of the race, before you canter up to the 'go' mark. Now, what say you?"

"It's as easy as cracking a nut to me," laughed the squirrel.

"It's my race as easy as digging up a hill of corn on a dark summer night, with the hounds penned up in the kennels," roared the raccoon.

And so they decided to race at once. They went out into the depth of the forest. They gathered up their kinsmen of the den, and the hollow tree, and the stone-pile, and the brush-heap. Mr. Rabbit was late in arriving, because he had gone close to the village to eat cabbages in a garden; and last came Mr. Woodchuck, tired already, for you see he never travels far for his supper of clover blades. Mr. Squirrel danced around like a prize fighter in the arena before time is called, and Mr. Raccoon sat upon the end of a log and grinned, with a large white grin edged around his dark lips. And Mr. Fox went over and rubbed his face against the old shellbark, and feeling the smooth sides, shook his head dubiously. Then he gave a flourish of his brush and announced that the race should begin.

"When I drop my tail," he said, "that's the signal to start," and the old shellbark replied that the arrangement was satisfactory.

So Mr. Squirrel and Mr. Raccoon went up the slope. There stood Mr. Woodchuck up on his hind legs, solemn and full of dignity. By common consent it was agreed that Mr. Crow, who was the only member of the feathered tribe present, should act as judge of the race, as the natural affinity between any two of the other animals might have left the decision open to doubt in the minds of the inhabitants of the forest in years to come. Mr. Crow accepted the honor assigned to him with becoming decorum. He perched upon the last bough of the old shellbark except one. When he had alighted on the very top branch, Mr. Raccoon called up: "That's not fair; I can't make it to the very top. Mr. Squirrel has the advantage of less weight."

"Why didn't you train down, Mr. Raccoon?" suggested Mr. Fox, slyly.

"I'll do my training going up, Mr. Fox," retorted Mr. Raccoon, with emphasis, "and I'll not be the pupil in the business, either."

"Hush, children," put in the old shellbark. "Save your breath for the toil ahead of you."

"All ready?" shouted Mr. Woodchuck.

"All ready," echoed Mr. Squirrel, confidently.

"All ready," grunted Mr. Raccoon, with lips compressed for the leap.

"All ready," hissed the serpent, who had taken his position at the foot of the tree.

And with that the fox let his brush sweep the ground.

Down the mossy slope came the two, Mr. Squirrel not exerting himself, but leaping along in little flirty jerks, while Mr. Raccoon forged ahead with steady leaps of measured distances.

Now they were within a hundred feet of the old shellbark! Mr. Raccoon was still ahead. Now they were within fifty feet, and Mr. Raccoon still gained! Now they were within twenty feet of the old tree and Mr. Raccoon slowed up a little that he might not cross Mr. Snake ahead of time. But just as he jumped over the tape Mr. Squirrel got into the race with a mighty leap, landing against the old shellbark, ten feet over the head of Mr. Raccoon. But he could not find a footing, and with a series of desperate struggles and whirls, twisted round and round the old tree, slipping lower and lower in curves to the bottom. And Mr. Raccoon, what was he doing?

Nothing more. He bumped into Mr. Squirrel at the roots, and stood upon him, hugging the old tree in his efforts to get a start up the slippery sides. But it was no use.

There the two racers fought and pushed, and leaped and bumped each other about, and tried to dig their claws into the slippery sides of the old tree, all in vain.

"Sand!" shouted Mr. Fox, convulsed with laughter, "Sand!"

"Bring a step ladder," howled Mr. Rabbit.

"Oh, the glory of it!" roared Mr. Fox. "Fourteen uncracked kernels of corn on Mr. Raccoon."

"Take the bet," shouted Mr. Crow.

"You can't bet," came in a storm of voices. "You're judge."

And all the time Mr. Raccoon and Mr. Squirrel were still at the foot of the old tree. Mr. Squirrel would run back a short distance and with one gigantic leap jump high up on the trunk, but gradually slip lower and lower every movement he made. And Mr. Raccoon carried pieces of broken

limbs and placed them against the trunk, and so mounted a little way, but could get no farther. Mr. Fox rolled upon his back and howled with laughter, biting his tail between his hind legs in a vain effort to stop his killing mirth. Mr. Woodchuck fell over on his side, and forgot all about his dignity. Mr. Possum could not have feigned death if a whole army of enemies were upon him, he did so shake with amusement and merriment.

And with the mirth of it all the old shellbark began to shake and tremble with laughter, too. He shook his leaves frantically. He shivered till Mr. Crow tilted and tumbled about like a cork in the spray of a fountain. He felt the tingle down in his roots, and then he began to burst with the glee!

His sides split in great crevices, and with the laughter he could not longer contain. Great chunks of his bark began to turn out in irregular angles and curves, and in a few moments he had kinked his coat, till he looked like the North Pole, decked in a garment of lost sails sent to find it.

But Mr. Squirrel had adopted another plan by this time and did not know of this transformation, else had he won in a canter. It had finally dawned upon him that he might ascend the old chestnut tree, and leaping branch to branch, reach Mr. Crow. So down the slope he came, eighty feet high, springing from branch to branch, and chattering with the gladness of victory.

But Mr. Raccoon had found the new coat of the old shellbark easy, and just before Mr. Squirrel reached Mr. Crow on the last leap, Mr. Raccoon poked his head around the limb and won the race. Mr. Squirrel was disqualified, besides, because he had not ascended the old shellbark's sides. He did not even deign to look at the old tree, so disgusted he was, but while Mr. Raccoon was carried off in triumph, went down by the chestnut whence he had come, and it was not till months afterwards, when the old shellbark was full of rich nuts that he learned how Mr. Raccoon had won the race. And when all the other shellbarks heard of the race they fell to laughing too, and split their sides so that every tree of that name to-day is covered with a rough coat, which peels and falls in great chunks. And if you go out into the forest you will find that both Mr. Raccoon and Mr. Squirrel can run up it easier than they can run upon the ground. Of course, Mr. Crow, who was judge of the race, is dead and can tell nothing about the truth of this story. And so is Mr. Rabbit dead, and Mr. Fox, and Mr. Snake, and Mr. Possum, but their descendants can tell you that not all hickory nut trees have rough coats, which ought to be a proof that only the trees who heard of the race and split their sides over it have a shaggy covering, and a proof also that I tell the truth when I tell of the "transformation of the shellbark."

II. THE BLANCHING OF THE BEECH

ERE the trees of the forest had had time to spread their seedlings beyond the Valley of Creation, there stood a clump of somber beeches not far from the gate of Paradise. They were close to the plain whereon the deer and the zebra had first tried their fleet hoofs on the new turf. They were close to the brook that ran from the Garden of Eden, and when they grew tall and stately they could see the portal itself, a little scorched by the flaming sword of the sentinel angel set on guard, never again to let Adam and Eve pass in.

And a little distance off stood one of the hills now cherished in the history of the christian, sloping down to the Valley of Creation, and to the very feet of the beech trees, shaded by the hills and their own boughs and branches till the trunks scarce

seemed separate from the dim light of the vale—for then the beech trees were not like whitewashed ghosts in the forest. They were somber trees, dressed in dull coats—as dull as the coats the chestnut and the cherry now wear.

All was peace in the Valley of Creation, for Adam and Eve had ceased to mourn. The great angel had laid aside the flaming sword and gone back into the clouds of heaven. The gauze-winged beetles and butterflies, and the birds, and all the creatures of the air whizzed and whirred, and droned and flirted their beauties in the sunshine. The animals stirred in the woodland, and the man and woman grew merry in their work and their love.

The strong forces of nature were yet at work, though, and the plains sometimes

raised up their backs, and sometimes the valleys straightened out their curves and kinks, as if awakening from a long dream.

Off and up to the distance the hill, which had its feet in the Valley of Creation, grew restless. That was Calvary! The Place of Skulls it was, the pinnacle that was to perpetuate man's shame, and the goodness of God. Now its round crest bubbled up, and cut out a piece of the red sun, just sinking for the night! The beech trees saw the wonder, and trembled.

And the darkness came on. The Valley of Creation filled up with the checkered shadows—dying, dying, lower and lower, till the sieves of the foliage and the twigs closed like a lattice overgrown with vines.

The red sun was down. In its gap an army of sullen clouds tossed their shaggy manes. The sky was stuck with spines of fire, and a dead afterglow burned on the tips. A sultry sense of darkness and danger settled in the glen. Birds tucked themselves tightly under their wings, and buried their beaks in their breasts. The bats came out for the night-flight, but timid, flitted back under shelving rocks. An owl hooted piteously in the branches of the beech trees, and the trees trembled.

The sad Place of Skulls heaved and shook. Its mighty breasts rose and fell. The grasses withered on it, and the winds whisked them away, as the hair is rubbed from a sick man. One long, deep breath of sorrow throbbed in the quick bosom, and then the pent breast broke.

The heart of the world was sundered! From Calvary, like a vision and a prophecy of that other broken heart, years and years afterwards, the fire and the life streamed out of the veins of the world!

From the wide wounds ran the giant tears of blood. Down through the valley-miles, down through the meadow-acres, down over the water-falls, down by the woody-edge, down by the fern-bower, across the pebble-moat, hard by the marsh-willow, and up the brook that ran from the spring in the Garden of Eden, ran the mighty tears of blood, hot from the wide wounds.

And the beech trees, just across the brook that ran from the spring in the Garden of Eden, saw the wild wonder, and trembled.

And now the crispness of things burning smelled in the Valley of Creation. Ferns

fell fast into the whirlpool of flame. The birds blundered, and burned their wings. Bats bumped the bed of blazes and squealed and withered, sleeping where their impressions still tell the tragedies of their death, on the deserts of cold lava. The thick trunks of trees, eaten as with a frenzied disease, thinned and fell into the sizzling paste. Monstrous saurians, angered with the odors that hung heavy in the Valley of Creation, dashed at the red bulwark of fire, and stood—dancing captives—with their twisted tusks tangled in the overlapping layers of flame. The valley was a house of howls. The slopes of the Place of Skulls were a riot-ground for imps.

And the beech trees saw all the wonder in the Valley of Creation, and trembled!

In the morning angels went down the Valley of Creation, and they were weeping. And they said: "Behold! Even Nature was frantic with grief last night, for here the mountain has broken open her breast, and the great heart of the Place of Skulls has drained itself."

"It is well," said a second angel. "For last night the Father and the Son sat in judgment over their plans for the Redemption, and it was decreed that the Son should perish as a man upon this Place of Skulls. And when the mountain heard its fate, it groaned, and arose in rebellion against its own hard lot, and tore itself asunder for sorrow. And it spit out the red rebellion in glassy strings of fire, and sent them out in mottled beads that fell like penance tokens about its neck and to its very feet, down to the beech trees by the brook that runs from the spring in the Garden of Eden—and, Behold!"

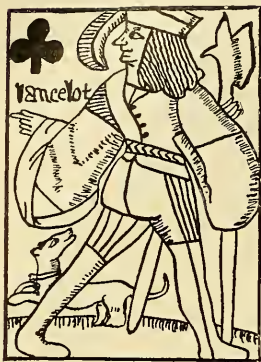
And when the angels looked upon the trees, they that had been so somber and dark, were white—as white as snow! Their round trunks gleamed in the sunlight of the morning, and their white arms reached up in supplication to the sky!

"It was the terror of the night," said the angels. "And so shall men turn white with the terror of the scene on this same Place of Skulls, when the Redemption is at hand."

And this is the story of the blanching of the beeches, the first beeches, that stood close by the brook that ran from the spring in the Garden of Eden, and near to the portal of Paradise, a little scorched by the flaming sword of the sentinel angel.

THE BEGINNING OF CARD GAMES

By North Overton Messenger



TUCHIM
AN EARLY KNAVE.

the benighted people of the dim ages, for as many years before. In all climes, and through all the periods that furnish a record of card playing, their fascination seems to have been paramount. Cards were brought into Europe by the witches, the soothsayers and the mysterious people suspected of being in league with the evil one, and it does not take a great stretch of the imagination to conjure the idea that the cards, too, were possessed of the spell, and wrought the influence of their first masters upon all who subsequently came within the range of their potency. For what whist player will deny the influence akin to witchery, of the cards upon him, even in this day and generation, when it is no longer necessary to burn witches? What poker player will not admit the devilish attraction of two kings that imperatively command him to draw for a third; or the siren appeal of the queen who clamors for a sister to keep company with the two knaves, already in hand?

It would be no exaggeration to say that cards have been the standard form of amusement for all classes for nearly eight hundred years. There have been high-water periods in the era, when card playing reached the extent of a craze, but there has been no low water mark.

It is interesting to follow the development of card playing from its inception in

CIVILIZED mankind has been playing cards since the year 1200, or thereabouts, and it is probable that the prototypes of the fascinating pasteboards had held their sway over the minds and fortunes of men, among those whom we are pleased to term

the fortune telling stage, through the gambling era beginning around the soldiers' campfire and extending into the palaces of kings and the homes of fashion; so on to the family circle where it begins to take an intellectual form requiring skill and science; and the relegation of the hazard to the club room and the substitution of small stakes for the large sums won and lost in the old times. In all these ramifications covering so many years, the variety of the games varies but little. There is improvement in method, the cultivation of the mind as education progresses, demanding amusements consonant with improved standards. Whist goes through evolution until it appears in the product of the day, still capable of apparently illimitable thought and study. The game of the gambler evolves into the American poker, combining the highest form of commingled chance, character study, perception, inference and self control.

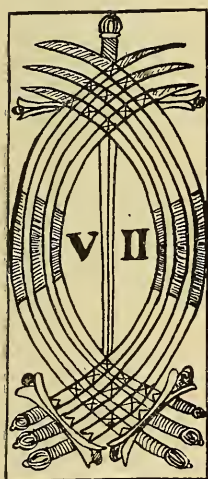
When the antiquaries, whose researches cumber the shelves of the British Museum and the Library of Congress, agree upon the origin of cards, it will be well to go into that subject. They go back, hand in hand, over a beaten track for 700 or 800 years, through England, Germany, France, Spain and Italy. Then they separate. One describes the trail leading across the Caucasus, the route traveled by early man as he came down from the Asiatic plateau. Another sees it plainly in Africa, back over the same road which the invading Moors took into Spain. Another loses it, to pick it up in China, or Egypt, with uncounted centuries intervening. There is no biblical reference to card playing, but there is little doubt that the prodigal son wasted a part of his substance in draw poker, or something like it, if cards existed in his day.

Records of card playing begin to appear in Europe about the year 1300. The cards in use in the preceding century were in the hands of the wandering gypsies who came across the mountains of southern Europe,

from whence no one knew. These cards were known as tarots, and were used for fortune telling, as shown by their symbols. Tarot cards signified the "Royal Road of Life." Thus there are found on their faces symbols of the emperor, the pope, knights, clowns, jugglers; emblems of justice, temperance, fortitude, the world, the stars, and the devil. Gradually the symbols are changed. The old Moorish packs contained thirty-six cards and had a king, a knight, a prince and the common soldiers. When card playing worked its way north, the gallant Frenchman, recognizing woman's potency in high affairs, added the queen. The imaginative sons of Provence gave the knave its first distinctive character. It was called "Tuchim," after a most precious bandit who ravaged the country side, and was a knave in very truth. Card playing received its first recognition in the law when John I., of Castile, prohibited it by royal mandate. It had gained such a foothold that it was the absorbing pastime with all, from the field marshal of the royal troops to the scullions in the royal kitchens.

were pique, point of a lance, for the nobles; cœur, hearts, sounding like chœur or choir, for the clergy; the trefoil for the husbandman and carreau, the head of an arrow for vassals. In Germany there were bells, hearts and acorns. Finally these symbols and the words describing them evolve through different stages into the hearts, clubs, diamonds and spades of to-day, the simple suits in the train of the present king, queen and "Tuchim," the knave.

As the cards and suits begin to take formative shape, the records of the games commence. All the games of early days were of military origin, bespoken by their titles and method of playing. They were birthed around the campaigners' camp fire, and reflected the ideas and practices which war begets. Piquet and lansquenet, both martial in character, were among the earliest games and long were favorites. When card playing extended into the walks of civil life and after it reached England, there were numerous modifications of these games to suit the tastes of the different



NOBILITY.



CLERGY.



CITIZENS.



PEASANTRY.

EARLY ITALIAN CARDS.

It would be a dizzy dance to follow the changing character of the cards, the evolution of the spots and the face cards. In the beginning the spots were symbolical of the walks of life. In Italy they were spade, or swords, typifying the nobility; cappe, chalices or cups, the clergy; denari, money, or the citizens; and bastoni, or clubs, the peasantry. In France they

classes that took them up, from the drawing-room to the servants' hall.

The perihelion of card playing, for money, was reached in the days of the French Louis's. It was the court amusement and was carried on with the luxurious extravagance that marked the age. The nobles of the court emulated the lavish customs of the royal households. Entire

suites of rooms were furnished for the card players. The walls and ceilings were decorated with designs suggestive of the game and its features; triumph, loss, and despair were depicted. The tables in the card rooms of Louis XIV. were made for the purpose, and were covered with green cloth embroidered with gilt. The green cloth is to-day, the wide world over, the gambler's color. In the houses of rich men the card tables, of curious shape, were often inlaid with rare woods or mother-of-pearl. Some packs of cards were printed on satin, others painted by the most popular artists of the period. Jacquemin Gringonneur was a famous card painter and charged Charles VI. of France "cinquant-six sols, Parisis" for painting three packs of cards. In the heyday of card playing in France it was popular to give balls at which the dancers were attired to represent the cards. At the court the stakes were high and disputes were frequent, resulting in duels. A distinct etiquette and code of honor was instituted for gaming, which has survived in spirit. To this day, among gentlemen, the man who cheats at cards becomes a social outlaw. In pioneer regions, death, quick and inevitable, is the portion of the trickster.

Naturally the amusements in vogue in Paris soon crossed the channel and were taken up by fashionable England. The solid Britisher fell as easy prey to the witchery of the gay pasteboards as the mercurial Frenchman, adapting the game to his temperament. Where else than England could one expect so ponderous a game as whist to originate?

Ombre was for some time a favorite game in England. Pope's description of ombre in "The Rape of the Lock" will keep its terms alive should Hoyle be forgotten. It originated in Spain, where it was known as *Il Hombre*, "The Man," and probably commended itself to Englishmen on account of the deep thought and attention required to play it. Primero was also popular in Britain during the reign of Henry VIII., Edward VI., Mary, Elizabeth and James I. Quadrille succeeded ombre and was followed by whist, at first called "whisk." Much gray matter has been wasted in efforts to trace the origin of the name. One researcher gives up the quest and falls back upon the supposition that it must have come from the

exclamation "Whist!" denoting silence, which is well known to be an essential feature of successful play. Whist was common in England as early as 1680, and in 1730 was given the stamp of fashion by a select circle of gentlemen who gathered to play in the Crown Coffee House, Bedford Row, London. In 1737, Hoyle's treatise on whist was printed and the game was recognized as a scientific form of pastime.

Card playing in England had quite as pronounced a run as in France. Bath was the center of gambling in the days of Beau Nash. The Earl of Chesterfield was the most notable gamester who frequented Bath and he was thoroughly fleeced by one Lookup, a gambler, who with his winnings built "Chesterfield Row." Card making grew to be an extensive industry in England, although the first attempts were crude enough, as witnessed by some stenciled cards, now preserved in the British Museum. In the reign of Edward IV., however, "The worshipful company of playing card makers," as the guild of London was then and is still called, was powerful enough to induce that monarch to prohibit the importation of French playing cards in competition with the homemade product.

In Germany card playing had gained great headway by the year 1400 and the burgher books of the fifteenth century contain municipal prohibition of card playing. It is recounted that in 1452 a Franciscan friar preached in Nuremburg against gaming with the result that the penitent populace burned in the market place great quantities of playing cards, along with other so-called devices of the devil. The oldest German game was *landsknecht*, which means foot soldier. It was taken up by the French who called it *lansquenet*.

Card playing is essentially a social game in America, the gambling feature being subordinated. A separate chapter could be made of the growth and extent of whist in this country. To-day it is undoubtedly the most notable game; periodicals are published in its behalf, many newspapers make it a feature in their columns, and whole factories are devoted to turning out whist appliances.

There is no evidence that in this, the beginning of the ninth century of card playing, there is any diminution of the witchery exercised by the entrancing bits of pasteboard.

INDIAN DANCES OF THE SOUTHWEST

By W. H. Draper

SPOTTED ELK, ghost dancer, sat in the shade of his lodge and puffed lazily at his pipe, while I talked with him about his people's dances. He was in ordinary citizen's clothing, and sat on a camp stool. This was proof that he had fallen from his former high station. In the past he had been a great prophet among the redskins, but his prophecies failing to come true, they had cast him aside. In old days he went about with a dozen coats of paint on his bare legs, and feathers in his long black hair. Indians seeking light followed him about. But now he was alone. His sun had set.

"There is nothing to tell," he grunted. "Indian's trail heap short. White man's trail go long way. Dance play out. Medicine no cure. When me sick, must see white doctor. When me cry, no dance for sadness. White man say dance no right. Maybe so. I tired."

One may as well try to get words from a stump, as to persuade a sullen Indian to talk, so I left the dethroned prophet to his thoughts and wandered among the rows of tents, and the Indians in the town on the Kiowa and Comanche reservation. They were preparing again for the ghost dance. A new prophet had arisen among them, claiming that he had received word from the Messiah to go on with the dance. Forgetting that for the last two centuries false prophets have been rising and falling, and unmindful of the fate of Spotted Elk, the superstitious and ever credulous Indians were again preparing for the coming of the end of the world. The way of these people is marvelous. Their life will be surrounded by a mysterious element as long as the race continues to exist. Spotted Elk believes that they have reached the end of their trail. Yet there is a large element among them who are wont to cling to the customs of their ancestors. Civilization has pushed them farther west and into smaller areas of land, but I doubt if half the Indians who are to-day wearing the blue cloth of civilization have really forsaken the religion of the ghost dance.

While they have seen their sacred customs trampled under foot, their hatred for the whites has increased. There is not, and never will be, any real friendship in an Indian's soul for his pale face neighbor. Train them as we may, there still remains an inborn hatred.

Indians have engaged in their dances ever since they were discovered by Colum-



Photos by the Author.

A YOUNG APACHE WAR DANCER.

bus. It is a part of their existence. They are superstitious and fighting people, and this is why the war and ghost dances are most popular with them. As early as the sixteenth century we have accounts of the Indians preparing for the end of the world.

Laulewasikaw, a Delaware Indian, was, during the latter part of the sixteenth cen-

ture, the founder of the ghost dance religion, and the Indians grasped it fervently. Its teachings were that the Indian tribes should all unite in one body against the encroachments of the white man. They should not till the soil, because it was their mother, and to plow was to tear out her bosom. The Delaware prophet said he had died and gone to heaven where he saw the Master of Life. The Master had given him a message for



A SCALP DANCER IN REGAL COSTUME.

his people. In brief this message commanded: "Do not drink, have only one wife, do not fight each other, do not sing the medicine song, do not sell that which I have placed on the earth as food, and when you meet each other, bow and give one another the (left) hand of the heart. Do all these things and the Master of Life will come among you soon and drive out those white dogs and bring back all your dead to life."

Of course the Indians wanted to get rid of the whites and they hailed with delight the new doctrine. But it failed to come

true, and the Indians killed the prophet, but they never forgot the message he brought to them. And about every ten years a new prophet arises among them and says he has been on a visit to the other world. He always has some kind of a prayer for the redskins. For a few months he is the center of attraction, then, when his predictions fail, he is killed. No one ever invented a dance to go with the ghost religion until Wovoka, a Piute medicine man came from out the Rocky mountains in 1872, and announced that he had been to heaven and the Lord Jesus had given him a prayer and a dance. The Indians flocked about him, and he was called the Messiah.

Wovoka claimed to have died when the sun went down and that Jesus took him up in the skies where he was told all these things. He said that the time had come, according to the Winnebago myth and other Indian signs, that the world was to be destroyed. He said the whites were getting too numerous and the game too scarce. This is the Cheyenne version of the letter of Wovoka, the Messiah, to the people of the red race:

"When you get home you have to make dance. You must dance four nights and one day time. You will take bath in the morning before you go home. I likes you all. My heart full of gladness for you. I give you a good cloud and a good spirit. There will be a good deal of snow this year. When your people die do not cry. You will see them again. Jesus is here on earth. Do not tell the white people about this. All will live again. When the earth shake do not be afraid. The dead will all live again this spring. Dance six weeks. I give you good paint for the dance."

All the tribes sent delegates to visit Wovoka and learn the new dance from him. Then they returned to their people and soon over a hundred thousand Indians were dancing it. That was in 1875, and they continued to dance, and believe, until 1890, the date announced for the end of the world. Wovoka said the end would come in the spring or early summer. As the time drew near the Indians grew frantic. Medicine men of the various tribes claimed to have visions, in which they were given additional instructions as to how the ghost dance religion should be interpreted. The Sioux warriors were told to go on the

war path against the white soldiers, and that, if they wore the sacred ghost shirt, bullets would not penetrate them. As a result the battle of Wounded Knee and the Custer massacre took place, in which several hundred Indians were slain.

While the Sioux were having their battles the other tribes were dancing and waiting for the end of the world. It was generally expected that a flood of mud would sweep over the land and envelope the whites while the Indians would be carried safely on top of the flood. While they slept, their dead would return and game would again

be plentiful to take a leading part in it, assemble for rehearsal of the songs. On these occasions from eight to ten are present, sitting in a circle around the fire. They sing the various songs of the dance, getting the tunes down to their satisfaction, but for my part I never could distinguish any kind of music in their songs. The closing song of the Kiowas follows:

The Father will descend,
The earth will tremble,
Everybody will rise,
Stretch out your hands,
The whole world is moving,
Let us pray! Let us pray!



INDIAN DANCING VILLAGE.

inhabit the forests. Every full-blood Indian in the United States engaged in the dance. All other dances were forsaken for the time being. But as the spring of 1890 passed and summer waned, and the dance availed nothing, the Indians went sorrowfully to their homes, knowing they had again been deceived by a false prophet. Some have refused to give up the doctrine and a ghost dance is held every year on some of the reservations. But the mass of the Indians know better, even if they will not admit it.

The ghost dance usually takes place on the banks of a running stream. For several days prior to the dance, those who ex-

The dancing ground is very smooth and before the dance commences is sprinkled with white chalk. This chalk is supposed to be sacred, having been blessed by the medicine man. Just before entering the dance they bathe in the sweat lodge. The dance commences early in the morning, the dancers forming a circle. They take hold of each other's hands and move from left to right. Then, jumping up and down and singing the ghost songs, they grow more and more excited, until they fall in a faint on the ground. Then the circle is closed about them and the dance goes on. While they are lying in a dead faint no one is allowed to go near them. They



A CROW DANCE IN PROGRESS.

are supposed to be in the spirit world, talking with dead relatives and killing game. Sometimes they remain in this trance for an hour.

All ghost dancers are painted, before the dance commences, with great care. Each design is from an inspiration received in a vision. Usually the dancer adopts the particular style of painting which, while in some previous trance, he has seen worn by some departed relative. If he has not been in a trance the painting is done by some one who has seen the visions. The painting consists of elaborate designs in yellow, red, green, and blue upon the face, with a red or yellow line along the parting of the hair. Suns, crescents, stars, crows and other birds are the designs most used. The ghost shirt is like any other shirt, only that it is blessed by the medicine men before being worn. Men and women dance together in the ghost dance. The women are better dancers, because they see the visions oftener.

No dogs are allowed in the vicinity of a ghost dance, as they are considered only fit for food. No drum or other musical instrument is used in the dance, neither are any fires allowed in the circle, as is customary in other dances.

The dance lasts from five to six days. When all the participants have fainted and seen their dead friends, the dance is called

off by the medicine man of the tribe, and all go home.

When the Indians used in earlier days to start the war dance, it was a signal for our soldiers to make ready for a battle. It was always called just before the Indians started on the war trail. But now the war dances held on the reservations of the Southwest are so peaceful a veteran would not recognize them. The war dance in its true meaning, went out of date thirty years ago when Geronimo, the famous Apache chief, was captured. This old scalper was the leader of all the border raids, and justly considered the meanest Indian that ever swung over a broncho. He is now a prisoner of war at Fort Sill, O. T., and all of his following are either dead or captives with him. The Apaches, Comanches, and Cheyennes are the principal war dancers. Although the Sioux were great fighters, they are too corpulent to take part in the fast, fierce movements of the war dance. It requires great presence of mind and agile movers to keep pace with the average Indian war dancer. In these dances, which are hurriedly called, the redskins appear naked, except for the breechcloth. Their bodies are painted red, with green spots scattered here and there. They wear a feather in their hair, and carry a scalping knife in their hand. The dance takes place at night around a huge fire.

They dance around the fire and sing the war song. Their yells fall upon the ears of lonely white travelers with no less terror than the approaching roar of a typhoon at sea.

We are coming, we are coming!
On the war path, on the war-trail!
We want the pale face scalp!

The dance only lasts two hours, but in that time the Indians get worked up to a terrible pitch. They eat raw meat after the dance and then go on the war trail. Only fate can save those who fall in their path. Geronimo says he has killed over a hundred white men in a single battle.

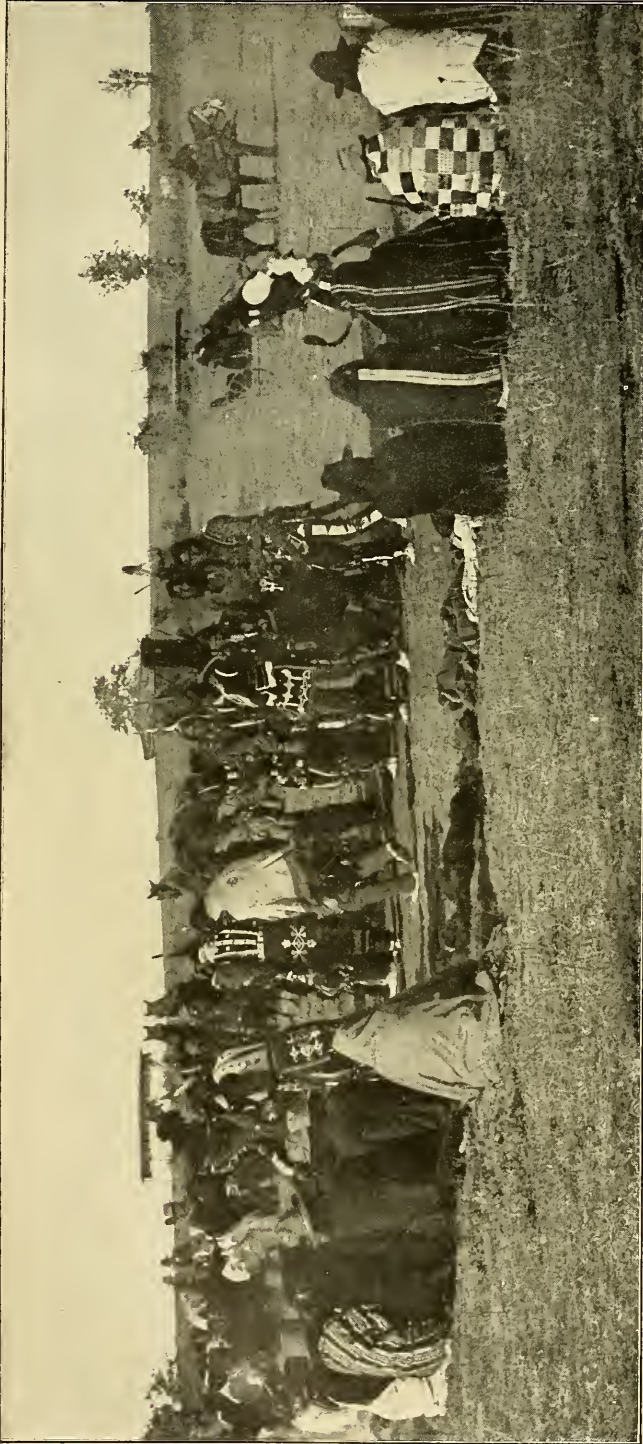
The scalp dance is a part of the amusements of all the fighting tribes. It is carried on much in the same manner as the war dance. Both are held in the open air. No music is needed and nothing but the battle songs are used. In the war dance a fire is always burning in the center of the dancers, while in the scalp dance a pole, upon which used to hang the fresh scalps of the enemy, is placed in the magic circle. The war songs are prepared by the chief. There are many of them, but all have the same meaning, that the great spirit will finally help them in all their struggles against the pale face. A scalp



Apache.

Kiowa.

Comanche.



A MODERN GHOST DANCE RECENTLY HELD NEAR DARLINGTON, O. T.

dance lasts all night, sometimes longer. Nowadays the scalp dance is nothing of interest, because the dancers use the old dry scalps of persons killed many years ago. Fresh scalps were used in every dance, hence when the news spread that a scalp dance had been ordered the whites made haste to leave that vicinity. The Cheyennes, Arapahoes and Kiowas were ardent lovers of the scalp dance. A Comanche scalp dance was to be most dreaded. The squaws of the Comanche tribe did all the killing for this particular amusement and they were without a fear of anything. Innocent women and babies were frequently murdered by these treacherous squaws to furnish sufficient gore for the dance to proceed. The Comanches yet hold the scalp dance, but it is very tame. Scalp dances are held in the spring. One of the leading religious dances of the prairie tribes is the crow dance, an auxiliary of the ghost dance. It is a favorite with nearly all of the tribes of Indians to-day. It is performed in the afternoon, differing in that respect from any other of their dances. Hypnotism plays a prominent part in this dance, the dancer falling into a hypnotic trance as a culmination of his desires. The ceremony of giving



SWEAT LODGE OF GHOST DANCERS.

the feather is a unique part of the crow dance. Sacred feathers are placed upon the heads of the seven leaders who enter the dance. When any dancer desires to be given a feather he takes six of his friends so as to make up the sacred number of seven, and goes to one of these leaders. He sings to him:

The crow has given me the signal,
When the crow makes me dance,
He tells me to get the feather,
Says the father, I want the feather.

The leader then goes alone into his lodge and paints a crow's feather for the applicant. In return for the feather he is given some small present. The men participating in the dance are stripped to the breech cloth, but the leaders wear the regular clothes of the tribe. They are supposed to be consecrated, and may do as they choose, and the ordinary dancers must obey their wishes. Young men are generally called by the great spirit to act as the seven sacred leaders of the crow dance. The dance lasts six days, during which time all have called for the feather, and some have asked for it a second time. Hundreds of feathers are used. Men and women take part, and the songs refer to the general subject of the crow and the Messiah, but are set to a variety of dance steps and evolutions performed by the dancer. As the young leaders of the dance are constantly studying new features the crow dance has grown to enormous strength

among the Indians. A big drum is set in the center of the circle of the crow dance, and two strong bucks beat lustily upon it throughout the ceremony. The music is without time. When the leaders go home the elaborate pendants of varicolored feathers hanging all over them make an amusing spectacle.

The most important feature of the crow dance, as it is carried on now, is the hypnotic process of sending the dancers into the spirit world. It is a huge farce, carried on by the medicine men, and I wonder that Indians, so shrewd in other things, do not discover the

fraud. If they do, it goes unnoticed, and I am inclined to think a great many know the real situation. But the Indian agents with whom I have talked, opine that a majority of the Indians are firm in the



GERONIMO THE FAMOUS APACHE WARRIOR.



ARAPAHOE GHOST DANCERS.

belief that they do see the spirit world in their hypnotic dreams. Whenever any of the dancers express a desire to see their dead, they are shoved into the dancing circle near the prophets, who carry painted feathers. These feathers are twirled in front of the excited dancer's face, and he or she is told to think only about their dead. After awhile they fall in a faint to the ground from the excitement and, while there, they are supposed to have the visions that have been impressed upon them in the dance. The young women and men are more easily affected than the older persons.

There are a number of dances of minor importance, such as the green corn dance, held in the spring just as the corn begins to turn yellow, for the purpose of thanking the great spirit for bountiful crops. All of the tribes engage in it, when they feel that the crops need praying for.

The Osages hold what is known as a pony smoke, but in reality it is nothing more than a feasting on dog flesh, of which diet they are very fond. At these dances, a white dog is killed, and put in a large pot of water in the center of the dancing ring. The Indians join hands and circle around the pot howling in glee. When they have

tired they break ranks and each takes a piece of the sacred meat and eats it. Then they throw in other dogs and dance again, until twenty or thirty, and sometimes fifty, dogs have been consumed.

A ban has been put on the medicine dances, because they often result in the loss of life. But they are very exciting. I once attended a medicine dance in the Creek nation. In a clear space is placed a large iron kettle. At daylight four medicine men come toward it, each from a different direction. They carry with them some mysterious herbs, which are placed into the kettle and then a fire is started. This decoction is partaken of by the four medicine men, and then they pass it around to the Indians who have gathered at a respectful distance. It acts as an emetic. After this the medicine men pronounce them clean enough to enter the dance. They then form in a circle around the kettle and dance for an hour or so, then again partake of the snake root, as it is called. Then again vomit and proceed with the dance. This is kept up until they are so weak they have to be carried to their teepees and death-like silence pervades over the scene of the medicine dancers. Some are thrown into a fever and after a few years' practice no less than one-half of the dancers die.

All over the Southwest are scattered reservations of the various tribes of Indians and each has its own peculiar dances. To describe them all would be tedious. But to enjoy the real Indian you must see him clothed in gay colors in the dance. Old and young alike. It is the springtime of their life. From beneath the paint and feathers you will see happy faces beaming with excitement. The sullen expression, so common in Indians, has vanished. The lazy motion of their body is lost. Their small black eyes sparkle as they whirl around the circle, lifting their bangled legs high in the air, and humming the hu, hu, yuh of the dance song. But when the dance is over they become the same lot of morose reds who have given the West so much trouble. They give only the grunt for an answer. They scowl at you when you speak to them, and flee when you ask a favor. The light of civilization has been thrust upon them. To the Indians it has been a consuming fire.

BIRDS AT SHORT RANGE

By Leander S. Keyser

IT was winter, and my friends the song birds were snow bound when I laid my plans to reward them for the many joys they had aforetime, and would again bring me.

It was a simple, yet effectual, expedient which I adopted. I put up on a pole in my back yard a small table, high enough to be beyond the reach of the chickens; and on it I placed, and renewed from time to time, various kinds of suitable food, such as cracked nuts, hemp seed, and suet. The birds preferred the nut kernels, eating them with much relish or storing them away in all kinds of crevices, to be eaten when appetite demanded.

A nuthatch was one of my favorite guests during the greater part of the winter. It was an odd circumstance—at least so it seemed to me—that only one nuthatch found the outdoor feast. True, one day a second nuthatch visited the place, scurried about nervously for a few minutes, and then flew away to return no more; but the first bird continued to come to the table and window sill every day for several months, never divulging his festal secret to his fellows in other parts of the town or the adjoining woodlands.

How does the nuthatch contrive to scuttle head-downward on the bole or branch of a tree, and do it, too, in so blithe and dexterous a manner? My study of my little guest at short range enabled me to settle that question, and at the same time correct an error into which I had been led. My mistake was this: I supposed that the nuthatch simply crept down his wall by holding both feet directly beneath his bosom, his rear claws hooked in the bark, thus keeping him from sliding downward. I confess that I had often wondered why this bird had only one hind toe on each foot, and three in front, in common with all the perchers. This seemed all the more anomalous when I remembered that the nuthatch's favorite position on a tree trunk is with his head downward, especially when he wants to hammer a grub or a larva out of the bark. It appeared

to me two hind toes on each foot would suit his purpose much better.

But our interesting creeper has quite another way of racing down his arboreal wall, as I discovered by closely watching my little visitor. He does it in this way: one foot is held beneath him and set slightly forward, while the other is flung backward and somewhat to one side, so that the fore toes are turned outward, the sharp claws gripping the bark firmly. As the bird goes hitching downward, one foot may often be seen reaching forward and the other backward, both alternately gripping the bark and loosening their hold. Is not this an admirable contrivance? It was a discovery for me. In this way the little bird is able to keep his poise and to prevent himself from slipping down his vertical hillside. If he kept both feet directly under his bosom he could not maintain his balance, but would be likely to tilt over on his head, or wobble from one side to the other. My interesting guest could even descend the wall of the house, his sharp claws catching the edges of the bricks, where they jutted out beyond the mortar.

About the middle of March the nuthatch ceased his visits to my table. How was his desertion to be accounted for? That question might have been easily answered had there not been a nuthatch in the neighborhood which called and chattered noisily among the trees for at least two weeks afterward. If this was the same individual, it is difficult to explain his sudden prejudice against my festal board—unless, forsooth, as spring opened, he found plenty of insects and larvæ, which he relished more than he did the banquet of nuts and suet. I am disposed to believe, however, that my winter guest took his departure for a more northern summer home, while the clamorous chatterer in the trees was a migrant from the south who did not have the wit to find my birds' *table d'hôte*.

Three tufted titmice and two black-capped chickadees were also among my

feathered visitors, eating freely of the banquet spread for them. It was interesting to note the social relations existing among the several species of avian folk. The tufted tits were masters of the nuthatch, in spite of his long stiletto of a bill. In several scraps with them he was obliged to beat a retreat, which he did in anything but a pleasant humor. When they occupied the table or the window sill he never ventured to fly down, but would perch in the trees and chatter his resentment. However, the blackcaps had to fly before him, and if they happened to reach the table before he arrived, he had no hesitancy in dashing down among them and driving them away. All the small birds fought shy of a pair of blue jays, which were accepted as regular boarders at my table during the winter.

The following is a description of the deportment of my birds on the first of March, a sharp wintry day, with a deep snow mantling the ground. The first birds to come for their breakfast were the blue jays; then the chickadees arrived; both species ate their fill, and then proceeded, as usual, to hide some of the kernels in the crannies of the bark of the neighboring trees. For the first time a junco—a female, I think—paid my birds' table a visit, eating some crushed corn that I had scattered on the ground and snow. A female cardinal also helped herself to the corn and seeds on the ground, grinding them up with her stout beak. Her feet becoming cold, she squatted flat on the ground and continued to pick up the tidbits. At first I thought she was hurt, but soon discovered that this was only her way of warming her frosted feet. Presently her brilliant mate swept down by her side, ate a few hurried mouthfuls, and dashed away with a loud chirp.

At 8.10 the three tufted tits arrived. Why they did not come earlier, I cannot explain, nor do I know where they spent the night. On several occasions they loitered elsewhere until after ten o'clock before they came for their breakfast. While they came every day for about a month, they were somewhat erratic in their visits, and some of their absences were unaccountable.

Some popped corn placed on the table was not touched by any of my feathered dependents. The junco hopped about on

the snow and ice, now drawing up one foot and then the other into the feathery pocket of her bosom to warm it. Junco was exceedingly shy of the jays, no doubt her previous experience with them having been anything but pleasant. On the same morning I noticed the first tree sparrow feeding in my yard. The English sparrows gathered around it, and chirped in their impudent, bullying way, hedging close to it, but never making a direct attack, and so the little stranger simply hopped out of their reach and continued to pick up morsels from the snow. Evidently the English sparrows are at any rate first-class bullies, and I believe that they almost Hector the life out of many shy and sensitive birds. How long could any of us human folk endure the guying and derision of a crowd of bullies.

The nuthatch's conduct was queer this morning. He did not come to his repast until half past ten—rather late in the day for breakfast. What had he been doing all the morning? By that hour the nuts had all been eaten, or borne away by the earlier visitors, and the nuthatch seemed to be greatly disappointed; so I placed a fresh supply for him on the window sill. Immediately he went to work with great gusto. His method was to eat greedily of the small fragments for a few moments, then seize a larger kernel, dart away with it, and hide it in some cranny of the bark, or even in a crevice of the wall of the house. A cardinal came chirping to one of the trees, when the nuthatch stood on the sill like a statuette watching the brilliant intruder until the latter flew away. Presently the tufted tits pounced upon the sill, and drove "Nutty" off, although he scolded like a vixen before he yielded. Then the nuthatch and the tits came to the repast by turn, the former waiting in the trees until his rivals had left the coast clear.

"Nutty" found a broken shell with a kernel in it. He bore it to a tree around the corner of the house, laid it in a crotch, and standing above it, began to pound it vigorously with his bill. It slipped and fell into the deep snow, sinking entirely out of sight; but the bird darted down, burrowed in the snow, and recovered his lost treasure. His next move was to push it, for safe keeping, in a deep fissure in the trunk of the tree, from which a mo-

ment later he pulled out another kernel, and stored it elsewhere. Then he seemed to think that he had worked enough for a while, and so, as the tits had done a few minutes before, he disappeared, although there were still quite a number of kernels left on the window sill.

On the same day a black-capped chickadee, with a tidbit in his bill, clung to an icicle at the spout. It was difficult to see how he could keep his hold on such a hard, slippery surface. But he is capable of performing other feats. He can cling to the trunk of a tree like the nuthatch, although he never clings head-downward; but when he wants to change his position, he must loosen the hold of his claws, and flit over by the use of his wings. He has the clinging, but not the creeping, skill of his relative, the nuthatch.

Both the tufted titmice and the black-capped chickadees were able to manage the hemp seed with a rare degree of masterfulness. With them all sort of food that is too large to be swallowed at once, is thrust upon the perch and held down by their feet, while they pick it into edible bits with their bills. In the same way they handled the hemp, holding it beneath the two inner toes of both feet, pounding and boring with their stout little beaks, until the shell scaled off and the kernel was picked into pieces small enough to be bolted. The broken and emptied shells were scattered all about on the table and on the ground beneath.

Somewhat to my surprise, the snowbirds were able to break the hemp, not as the tits and chickadees do, but by holding the seed between the mandibles, and biting on it until the shell cracked and the kernel was extracted. Some seeds are too hard for Master Junco, and so he rejects them, and picks up those that will yield to the pressure of his little mandibles. Of course, the cardinals, with their great, horny beaks, have no difficulty with hemp.

The downy woodpeckers worked a surprise on their purveyor. Whether there was really more than one downy, I do not know, but I am disposed to believe there were at least two, although both of them never visited the festal board at the same time. One day, in midwinter, a downy came to the table and tried to secure some of the kernels; he seemed to be very awkward, able to cling to the edge of the board,

but unable to balance himself on a flat surface. When he tried to reach down for a kernel, he had to use his wings vigorously to prevent tumbling over. In other ways he displayed his clumsiness. Some time afterward a downy—whether the same one or not is an unsolved problem—visited the table and acted very differently. He not only reached down easily from the scantling on the side of the board, but also jumped down on the flat surface of the board itself, and hopped about on it without any difficulty. Presently he ambled over to the piece of suet, held it with his feet, squatted back on his haunches, and proceeded in the most deliberate manner to make a meal. While he seemed to bore and probe the suet rather than peck it with stern blows as the nuthatch and tits did, he contrived to break off bits that speedily went twinkling down his throat. This woodpecker, by and by, grew familiar enough to come to the window sill, where, if I kept very still, he would help himself to a piece of suet. A hairy woodpecker paid an occasional visit to a chunk of suet which I fastened in an apple tree some twenty feet from my study window, but he never sufficiently overcame his bashfulness to venture to the table.

All birds are exceedingly watchful. My visitors never ate more than a few mouthfuls without looking up and glancing around to see if danger were near. It is very hard to catch a bird napping. For instance: no matter how swiftly another bird might swoop down to the table, or from what unexpected quarter, it never could take a chickadee unawares. There was always enough time for the little expert to pick up its tidbit from between its feet, and fly off with it to another perch, before the intruder could alight.

As the spring advanced, I was sorry to find that my feathered friends were disappearing. First the nuthatch ceased to pay his daily visits to the table, then the coming of the tits became irregular, and finally they remained away altogether. The same was true of the other species, except the cardinals and the chickadees, which are summer residents in the town, and may be disposed to patronize my free restaurant all the year round. I shall welcome them, for birds at short range are an interesting study, well repaying the trouble.

LOUISIANA BAYOU AND MARSH SHOOTING

SHOOTING ON THE LOWER COAST

By Alexander Kidd

IF one take a steamer at New Orleans and drop down the Mississippi seventy-five miles, he will find himself in the midst of a country calculated to delight the heart of the most blasé sportsman. It is a strange country, too. There are none of the hills and broad stretches of forest through which the hunter has been used to wander in the north, but instead, a solid strip of ground on either side of the river merging into a long stretch of marsh land. On the eastern side one can, in some places, look across an open marsh and catch the glimmer of the bays beyond; but on the west the solid land gives way to the great, dark dismal swamp of Louisiana. It is covered with timber so that there is no looking across it, and you can not walk into it for any distance, because the ground is too soft to bear your weight. If you want to explore the bayous that in every direction intersect the marsh you must have one of the seasoned trappers go with you.

The solid land along the river's bank is divided into little farms, owned by orange raisers and fishermen. Most of the farms are so small that to us of the north they seem scarcely more than gardens.

Introduce yourself to an orange raiser. He speaks both English and French. He will talk with you in either. Tell him you are down from the north for a few days' hunting and he will give you a right royal welcome. Walk back through his orange grove. You will be astonished to find deer tracks on the edge of it, where the solid ground gives way to marsh land. Yes, here are deer tracks within a hundred yards of the house, and in a country, too, which has been inhabited since the days of Evangeline and Gabriel.

One would expect the deer to have been exterminated a century ago at least. And yet their presence is not so strange. Speak of a desire to go into the marsh to hunt. Your "Cajan" friend laughs at you. You

would never get out, he tells you. "Do you think," he asks, "that there would be any deer left after all this time if men could go into the marsh and hunt them down as they do in the forests of Michigan and Maine and New York?" Not at all. The swamp is a city of refuge for the game.

At Venice I met Jean Preant. Jean is a trapper; the son of a trapper. He lives in a cabin on the bayou with his mother and brother, and the marsh is an open book to him.

In his pirogue, which Jean paddled rapidly and deftly, we passed down the bayou and out into the swamp where the dense foliage hid the sun from sight, where were Jean's traps, and a thicket so dense one could not see ten feet from the water. We returned with ten coons and three or four mink.

The woods were literally full of animals. Coon tracks were everywhere. Every tree seemed to shelter from one to a whole family of the animals, but the winters are so warm in Louisiana that their furs, which would represent several dollars to a Canadian trapper, awakened no enthusiasm in Jean. He would not get more than fifteen cents each for the coon pelts.

The summer is Jean's chief harvest time. Then he kills alligators. Their skins bring more than fifty cents each. The saurians abound in the marsh and trappers have two methods of killing them. Some times they "shine" them at night, just as pot hunters in the north "shine" deer, except that the deer stand on the bank to look at the light carried in the canoe or boat, while alligators swim near the pirogue, and are at close range when the hunter fires a heavy charge of buck shot at the flaming eyes.

The other method is more sportsman-like. Jean showed me a hole, something like an enormous musk rat hole, with an entrance under the water, running back, as he assured me, into the land and rising

there into a little cavern above the water level. That, he said, was the den of an alligator.

Sometimes, Jean went on to explain, trappers take a pole on the end of which have been fastened two or three strong hooks, like enlarged gaff hooks. One jumps into the water, sticks the end of the pole into the alligator's den, prods the saurian until it opens its great mouth, and snaps in anger at the intruder. Then it is hooked, dragged out into the bayou and killed with an ax.

I asked Jean to drag one out and let me fight it. He declined. I offered money. Jean was insulted. He stopped paddling, rolled up one trouser leg and pointed to two rows of ragged white scars.

"Look there," said he, "one got hold of my leg one day. It very dangerous when you not know how. Oh no, I not let you try."

We left the bayou and started to walk across the the border ground, half marsh, half solid land. It was covered with a dense growth of tall grass. Every ten steps, or so, a rabbit would jump up. A glimpse, and he would be gone. It was a matter of snap shots into the grass where a bunch of gray had disappeared, but it made sport without any great cost of life.

Next day before dawn we groped our way to the pirogue and Jean paddled silently down the bayou. In a few minutes he landed, and leading the way across a piece of marshy ground stopped and pointed to a log.

"You sit there," said he, "I go to another runway farther in."

Now I knew the method pursued by these trappers when they are after deer. The animals go out to the solid ground at night to feed. They are back in the swamp again as soon as the sun is up. The trapper steals in behind them, takes his place on a runway at the edge of the marsh and waits for dawn to send game back to its hiding places in the marsh.

It was scarcely light at all when the roar of Jean's shot gun awoke the marsh and a few minutes later he came toward me carrying a young buck. Deer tracks were plentiful on the runway, but Jean said there would be no use waiting any longer.

It would be hard to name a kind of migratory bird that may not, in its season, be shot on the lower coast.

The bittern, of which the "Cajans" are very fond and which they declare tastes better than turkey, are to be found everywhere. Even in the old moat at Fort Jackson, now grown up with weeds and brush, I found a large flock of these great handsome birds. When I frightened them they rose clumsily and circled round with the movement of herons. I could have had several shots before they settled down in the tree tops on the opposite side of the fort, but I had no other reason or desire to shoot them than to fulfil my promise to the old serjeant who had charge of the reservation, that I would get him the material for a bittern pie, and I shot but three. I left them circling about the source of danger.

One finds ducks in any quantity back from the river where the bayous widen out and become bays emptying into the gulf.

These bays are generally shallow, separated by low islands and peninsulas. Thither goes every variety of duck shooter, from the sportsman to the man with the "four gauge" shooting for the market. They make their blinds on the marshy bits of land and kill ducks by the hundred.

Now and then while sailing on the big river one gets a shot at ducks, but this is seldom for the birds are wary there.

The snipe are erratic little fellows. To-day the marshy ground along a certain bayou swarms with them. To-morrow they are gone. But if a man is on the Lower Coast for any time he will fall in with many a flock and for a time have great sport.

Perhaps the most beautiful sight of the whole Lower Coast is the one at the very mouth of the jetties. There perched upon the rocky walls designed by Captain Eads, or flying about overhead, are millions of gulls of every description, great pelicans that pounce down here and there in so clumsy a manner that the stranger thinks they are subject to fits. Other birds, large and small, from the great heron and the beautiful egret to the crow and the buzzard, fly about, or sit upon the walls, or stand on the sandy beach. Out in the muddy water which the great Mississippi pours into the pure green of the gulf porpoises are leaping. It is a carnival of bird and animal life, and the sportsman who is also a lover of nature will be glad to lay aside his gun for a day and walk about the stone walls at the jetties' mouth a harmless spectator of the frolics.

CARRYING THE MAIL OVER THE ANDES ON SKIS

By Johannes Hroff Wisby

HOW the winter mail is carried across the Andes Mountains in South America, from Valparaiso to Buenos Aires, is a subject but very little known, yet probably the method is unique. No one who has not wintered in the Andes would be likely to guess that it is carried by skimen, not snowshoe runners, but snow skaters, brought from Scandinavia.



THE MAIL CARRIER IN SUMMER.

These skis (pronounced "shees") are long tough wooden shavings, so to speak, frequently measuring fifteen, and even twenty feet in length. The forward point tapers slightly and is curled upward, like the nose on an old-fashioned Dutch skate, and in the center of the ski are fastened certain straps to hold the "finsko" (Finnish shoes)—a rough shoe frequently made from reindeer or seal pelt—into which the skiman slips his feet. The method of strapping on the ski is such that the skiman at any time to save himself from danger may jerk his feet backward out of the leather grip on which he only exerts a forward, driving pressure. To balance himself in tight places, and in making his enormous jumps across the ravines, the skiman is always provided with a light-weight pole having a small wheel at the trailing end. The

"palm" of the skis, which glides over the snow with minimum pressure of contact, is either a plainly shaven surface or it may be lined with horn plates, or, when especially soft snow is to be encountered, skis mounted in seal pelt are usually selected. The lining of the "palm" always depends on the nature of the route to be covered. A horn-lined ski will stand rougher usage than a seal-lined one, but it also requires more firmly packed snow than the latter, which will glide away over the softest snow that ever fell, carrying a full grown man without making bigger tracks than a trailing whisk-broom. The expert skiman always prefers the seal-lined "palm," as it makes the finest and swiftest footing, whereas the plain "palm" is generally selected as the usual requirement of the route as long as the snow is deep enough, and the presence of "snags" does not demand the use of the stancher horn lined "palm."

This very plain and primeval outfit, which was originally invented by the ancient Norsemen, and which modern knowledge has not been able to improve, enables a good skiman to surmount the highest snow-clad ranges in the world and to skate his way where no living beast would dare to tread.

The Chilian and Argentine governments employ some three hundred expert skimen, imported from Sweden and Norway, to take the mails from Valparaiso on the Pacific coast, across the Andes to the railroad, which delivers them to Buenos Aires on the Atlantic seaboard. At no time during the entire route do the skimen touch the level of the earth, for the colossal altitude of the Andes keeps them traveling across snow wastes of from 3,000 to 18,000 feet elevation above the plain. At no time do they feel the firm earth under their feet, although huge, jagged rocks and precip-

itous cañons are among the obstacles they must surmount. They are ever whizzing over soft and receding snow beds which lightly yield like a mammoth buckboard to the swift pass of their fur-lined skis.

It is not always possible for a skiman to tell whether he is speeding across a snow filled cañon or merely across a tableland covered by but a few feet of snow, or rather he cannot tell until he strikes it, and once into it, there is no turning back; over he must. But it is essential for him to know whether there is a thousand feet of snow under his ski, or merely a layer of a few feet. In the latter case he can take his time and rest on his skis, knowing that the rock is directly under him ready to bear his weight even if he should wish to make a dead stop; whereas, in the former case, it is necessary for him to keep up a stiff pace to get over the heavy deposit of loose snow, into which he would quickly sink to certain death if he slowed his pace. No one who has not seen these hardy skimen of the North as they pilot their perilous trail across the roughest and most inaccessible ranges of the Andes, can form a real idea of the courage, skill and strength their onerous duty requires.

In spite of all their daring and experience I do not believe there is a single man among the three hundred skimen mail carriers of the South American cordilleras who would be able to successfully accomplish the entire run from the Pacific to the Atlantic seaboard, although I fancy many would for a wager venture to try this daring feat. It is hardly possible for a single man to know more than a limited number of miles of the Andes ski route, and there are ranges so difficult and dangerous to locate that a distance of a hundred miles is sometimes parceled out for half a dozen skimen to cover. To run the winter mail across the Andes is a much more intricate task than to follow the trail in our Rocky Mountain regions. The skiman cannot follow the mule trail; he must, on every trip, strike out a new route for himself, and the direction of these various routes changes according to the condition of the snow beds. To-day he may be gliding down a slope, which to-morrow he may have to scale, to avoid beating his way across a plateau which, in the meantime, may have been littered with "snags." The day after to-morrow he may be circling around the

cone of some promontory in a downward spiral route, looking for a good jumping off place, where he never before was obliged to jump. Then he may be storming down upon a plateau rent and partitioned by innumerable chasms and gorges, of which some are and some are not, bridged over the ice-floes; and of the latter the majority may be solid enough to bear him, which is likely to encourage his tackling some that are mere crusts of snow covered ice, liable to burst under him like a pane of glass.

The business of transporting the Andean winter mail is no sinecure. The mail pouch is handed out in Valparaiso and carried from relay to relay, one man covering perhaps fifty miles a day, another perhaps only ten, all according to the nature of the route, until after many dangers, and some broken skis, perhaps also a lost skiman or two, it reaches its destination. The idea of using relays was taken from the pony express mail service of our American plains of earlier days. The skimen of the Andes are really more than carriers of mail, for at the small mountain settlements where they stop, they figure as a sort of circulating post office, distributing the mail due and receiving the mail of the settlement to other points. In the dead of the Andean winter when even the hardy condor screams with cold from its eyrie among the summits of everlasting snow, the arrival of the skiman mail carrier is the only event of interest to which the inhabitants of the mountain settlements looked forward with expectancy and pleasure. Many a Dalar lad from Sweden, many a sturdy skiman from the Doure "vidder" (wastes) of Norway, have emigrated to these regions, lured by the high pay offered, only to find his grave, after a period of untold hardship and peril among the icy chasms of the great and implacable Andes. In those regions life is not valued much, and if a skiman breaks his neck on his solitary trail, he knows he would never be missed were it not for the mail he is carrying and failing to distribute.

When the great railroad from Buenos Aires to Santiago (Chili) is finished there will be no further need of the services of the skiman of the Andes. He will pass away as did the pony express riders of our plains, and like the buffalo hunter, the trapper and the squawman of our frontier

days he will be known on paper only. Let us therefore take a parting look, as it were, at this, perhaps the most picturesque figure of Andean landscape, before he vanishes from the sight of man forever. He dresses almost as snugly as the Eskimo. The "poncho" or cape, which he dons when carrying the summer mail on mule back is dispensed with in winter, as it would catch the wind and interfere with his progress. His clothes are tight fitting, and yet ample to allow a free movement of the arms and legs. Around the waist a leather belt is strapped, holding a supply of cartridges and a revolver in holster, for al-

the dangers which constantly surround him that it makes little impression on him. Once the skis are strapped about his feet he has no other thought than how to most skilfully battle the fury of the Andean snow storms and pilot his mail across the trackless tablelands safely into the hands of the "camarado" who is awaiting him at the relay post.

He starts. Plunging down the slopes of the "cordilleras" or ranges, he keeps his "weather-eye" open for "snags" in the shape of protruding rocks or blocks of ice. If he makes a severe collision he knows his journey is finished right there. He fixes



SKI MAILMEN'S ROUTE OVER THE ANDES 17,000 FEET ABOVE SEA LEVEL.

though there is no danger of his meeting with robbers in those altitudes, it now and then happens that he is attacked by wild beasts, and even by condors, which have been known to mistake him for easy prey and swoop on him like thunderbolts. He is very particular about his skis, for upon their capacity to withstand the strain of the tramp depends his life. A man with a shattered ski on the Andean mail route has the same uncomfortable time limit as a man overboard in an ocean gale. The skiman knows this, but he is so hardened to

his attention upon the dazzling expanse of snow about two hundred yards ahead of him, so as to detect any unevenness in the surface in plenty of time to avoid a clash or a fall. If, nevertheless, the inevitable happens and he finds himself racing full tilt into some "blind" rock, skilfully hidden by nature under a cover of snow, he resorts to the last and only rescue; he jumps it. When a skiman comes tearing down a mountain slope in this fashion he has enormous power for long distance jumping, and he accomplishes feats which

in the recounting, almost sound like fairy tales. The great momentum of his downward plunge, accelerated by the motive power exerted by his own skis, send him down the slopes like a projectile from a cannon, and when the time comes for jumping he bends his knees, crouches forward and leaps up into the air. This movement releases his skis from contact with the snow and he speeds through the air in an ascending curve, balancing his body by the aid of his pole until he again strikes the snow, perhaps a hundred feet away from the spot where he left it. As far as I remember the present record for long distance ski jumping is close to 120 feet, and jumps of from 80 to 100 feet are by no means scarce, though it takes an expert runner to essay any kind of jumping at all. The Andean runner does not jump his tracks unless he is absolutely forced to do it. It is a great tax on his strength, as well as on his nerves, and he is never sure of landing in easy footing. There have been cases where a skiman has jumped to avoid a rock, only to land on the naked ice, shattering his skis to splinters. Then, again, when jumping in a stiff breeze, the force of a sudden blast may harass him so that he loses his balance as he speeds through mid-air with the pole in his hands, and he may not succeed in landing on his feet. If he falls thus fouled by nature, on the rock or on the ice, there is, of course, little chance of his survival; and if he strikes in deep snow the skis are more than likely to fly off his feet and take an extra excursion of their own a few thousand feet down the cordilleras. Whenever accidents of this kind happen it is better to be an ass in Valparaiso, with four legs and two long ears than to be an heroic skiman in the Andes.

When the winter snows begin to melt and when the breath of tropical summer is wafted across the mountains, the mail carrier puts up his skis, doffs his heavy, fur-lined clothes, and straddles his mule. On these tough little beasts he loads an enormous quantity of mail, throws the indispensable "poncho" across his shoulders, dons his broadbrimmed Peruvian sombrero, and sets out to battle against a new set of dangers. The most awful of these is the chance he is constantly running of being thrown into the abyss by the collision of the cattle herds. Enormous

droves of wild cattle are continually passing on the narrow mountain paths, and the only means their herders possess of averting a collision between cattle heading toward each other, is their acute sense of hearing. With his ear pressed to the ground the mail carrier follows the custom of the native herder, and he, too, can hear the approach of a herd, perhaps several miles off. He listens again and seems to distinguish two sounds, one a dull, heavy rumbling ahead of him, and another behind him, very similar but more distant. Can the sound behind him be that of a mountain cascade? He may not have passed any such on his way, and if so he concludes, it must be a herd of cattle. Now, if the sound to the rear approaches rapidly and increases in volume, he concludes that it means a stampede of cattle bearing down upon him, and if the sound to the front diminishes, he draws the inference that it means a drove of cattle heading the same way as himself. He whips up his mule until he either sights the cattle ahead of him or finds a by-path of escape from the stampede to the rear. But if the sound to the front increases the same as that to the rear, he knows that two herds are stampeding against each other and that they will sooner or later crash together and bear him with them down the abyss, unless he finds a means to get out of the way. Fortunes in cattle are annually lost in the Andes in this way, for once the converging herds sight each other they get mad with fright, no power on earth can make them wheel about.

The Andean mail carrier must have sharp ears and good judgment to be able to tell the sound of a cascade, distant thunder or herds of cattle, and he must know the trail "like the inside of his pockets" to make his sense of hearing fruitful and instrumental to the highest degree of safety to himself and the mail. When at last, he arrives at the final post on the cordilleras, he may be unloading his mule on a promontory covered with everlasting snow on its lofty peaks, while some ten thousand feet below, blossom the fruits and flowers of a tropical vegetation under the summer sun. Up on the steep rocks where he stands the air is wintry and chilly, down below on the plain the half naked gauchos (cowboys) ensnare with their bola lariats the antelope of the Argentinian pampas.

WHERE THE PINE TREES GREW

IN THE LUMBERED REGION OF MICHIGAN

By Leonidas Hubbard, Jr.

ACCORDING to the sportsman's definition Northern Michigan starts where hard wood ceased and pine began to grow. It runs as far as Lake Superior's shore and merges itself on the west into northern Wisconsin. This bit of northland is a country of pine "slashings," black stumps, cedar swamps, and sand plains. It is a most uninviting land to look at, when it first comes into view, for you have just left southern Michigan's fertile fields, and these long, long stretches of endless black "burnings," this wearying succession of deserted houses, make the harshest contrast with the orchards and homes and pretty villages of the southern land.

But to the sportsman it is like some homely person who improves upon acquaintance. He soon comes to greet with a new thrill in his soul and a new throb of his pulse, these regions of blackness. For he knows that far off over the barren plains are streams so clear and pure that but for a ripple on the surface you could not tell where the water begins or ends. In those streams he knows, too, that trout are hiding. He knows there are silvery grayling battling with the spotted beauties to determine which is fittest to survive. And he hopes to fight a five-pound "rainbow" on one of the flying, tossing, singing riffles. He knows in these wastes of stump and second growth that the deer are breeding, that ruffed grouse have raised their broods, and that sport in rare abundance awaits him who has faith to push across the sand plains into this stretch of fire-charred blackness.

Wild turkeys never lived within these borders. They came up to them in great numbers, but when the land below was settled they dodged away to the southwest, or, hemmed in between the lakes, turned back and died with the flash of the settler's rifle. But deer, and bear, and grouse were here always. Once beaver dwelt on every stream, and more than two hundred years ago yielded up their pelts to the traders of

France at Michilimacinae. Now and then the howl of a distant wolf still comes floating to the hunter's camp fire, while at far separated intervals his rifle still brings down a catamount or lynx.

Here, too, is the "silent, smoky Indian," the last of those great tribes that fought with the Iroquois about Lake Erie, and retreated before overwhelming numbers to the north; which hunted these streams for bear and beaver, and spent the proceeds in brandy and fancy trinkets at the old French trading posts. He is a picturesque old character, but so lazy and shiftless that any attempt to hire him to run errands, or pack provisions is pretty certain to bring forth "Huh; No; too far."

Men much younger than the "oldest inhabitant" can tell you of a time when the region was one immense forest. Except in a few isolated patches where maple grew all was pine. Then came railroads and lumber "barons." These latter were picturesque old characters. They bought the land at pitiful rates and slashed away the timber, floating it down the rivers to sawmills on the big lakes.

In that day the State was full of false prophets. They said that Michigan, as a land of sport, was doomed. They said the cutting away of northern Michigan's forests would make the land as bare of game as were the counties further south. But they reckoned without their host. They had not counted that the barren white sand of this region would render its tilling useless. As the pine was cut settlers moved in, bought land, built houses and plowed fields. They sowed grain, but it never grew. This sand was not made for raising grain. It was meant to bear forest trees. Nature never intended that all ground should be cultivated.

So one by one the would-be settlers left their lands, their houses and their barns to move, sad hearted, away. Then juniper and popple, and jack pine began to spring up among the black pine stumps.

Fifteen years ago men said a decade would see the last of the deer, but they are more numerous to-day than then. Every year the country grows wilder and more desolate. There is no reason to believe that this will not continue and that northern Michigan will not offer better and better hunting as the years go by.

In many ways Michigan has taken good care of her game. Her hunters are limited to five deer a season, each. Foreigners must pay \$25 each for a license. Game cannot be sold. Her Fish Commission has been hard at work raising trout and pouring them into the streams. Brook trout fishing is growing better in consequence and monster rainbows are coming to delight the heart of the sportsman. Just now the Commission is working hard to repair the wrong it did in planting trout in grayling streams, and believes it has succeeded in propagating the silvery little fellow which threatened to leave these waters to its rival.

However, northern Michigan is a region that suffers much from lack of sportsmanship. It differs from an older and more settled community in both its blessings and

its curses. One blessing is the absence of numerous settlers and the riff-raff that collects about small cities. Its curse is conscienceless hunters. These come in for two weeks, or a month, in Autumn. They come from every county seat and every city in the southern part. They come also from other States. They leave the railroad and pitch their tents, or build their shanties on some stream far back from the settlements. There they proceed to act like South Sea Islanders.

I am ashamed to say it, but I have met more or less intimately, some dozens of this type of hunters. They belong to no sporting organizations; they have no regard either for ethics or for the continuation of sport; they are merely men who have money enough for one trip a year, and who inflict themselves upon this poor region as the nearest at hand. Formerly they shot deer and shipped them from the State. When the law stepped in to interfere they sold the animals in Michigan markets. This also was stopped and the kill of each man limited to five animals. Then followed seasons when with each party went one or more professional hunt-



ON THE PINE SLASHINGS.

ers, who shot deer that the "sportsmen" shipped as their own kill. Again the law stepped in to forbid, and now each hunter who ships a deer must make affidavit that he himself shot it. Even pot hunters hesitate at perjury and these abuses are practically over.

However, these little parties of shooters from the south play havoc with other forms of sport. Hidden away in their effects will be found nets and spears and dynamite. Trout are spawning in deer season, yet even this fact does not deter, and a deep hole will be convulsed with dynamite, or choked with a gill net. At night the hunters get out upon the riffles with a "jack" full of burning pine roots and have "fun" spearing trout.

that the laws are growing more strict there is every reason to believe that Michigan sport will continue to improve. Besides the bettering of Michigan's laws, there is better enforcement. In the past the deputy game wardens for each county have been altogether too passive. Sometimes they have not had even the virtue to remain passive, and tales have not been wanting of wardens who themselves went after illegal deer chasers and returned with illegal deer of their own killing—wardens whose pursuit of game outlaws resembled the career of Captain Kidd as a pirate chaser.

A most hopeful development which I noticed this season for the first time in Michigan is the offer of rewards tended to



MICHIGAN "BURNINGS."

One other form of nuisance exists in this region. This is the settler. He catches trout under six inches in length, and spears bass and pike in the lakes. He also kills deer out of season. But beside the contemptible miscreant from the south, who calls himself a "sportsman," and dynamites streams, he is a model of uprightness. He shoots a deer in summer merely because he wants food. His trout catching is limited, except when he is in the employ of some hotel, to his own needs. He never kills purely for the sake of killing. He never uses a dog, and if a party from outside brings hounds into the woods they fall before his rifle.

But both these nuisances have been unable to check the increase of game, and now

stimulate the activity of these officials. Some county boards have offered such rewards. That of Kolkaska county, for instance—in striking contrast with some boards farther south which decline to allow even a warden's regular fees—has been voting ten dollars to its warden for each arrest. The railroads, too, are taking a hand in the matter. The Flint and Pere Marquette is notable among these as offering fifty dollars to each person furnishing information sufficient to convict a violator of the trout law.

A few years ago an expedition into Michigan's hunting grounds was something to be remembered. A local hunter, half sportsman, half farmer, was guide on my own first trip after Michigan deer; or to be

more nearly correct I was his guest. We drove behind a slow team over roads where the wheels sometimes sank half way to the hub in pure white sand. The black stumps were desolate enough, but when we reached the hardwood forest there was a welcome change. Far away off until they hid one another from sight, ran great maples and hemlocks. There was scarcely any underbrush and the mighty trunks were visible in all their beauty. Their boughs met over our little wagon road and we seemed the only human beings in one vast world of forest.

The going was so slow that we walked now and then by turns, killing partridges, which would sit and nod or duck their heads while we fired shot after shot. We camped at last in the forest's midst, in a stretch of half a dozen townships that had not a single inhabitant. A little lake of some hundred acres opened out before our cabin and the great trees fringed it like the green garlands about some jeweled punch bowl.

"This hardwood," we said, "will never be destroyed. It does not offer the reward which has tempted men to cut away the great pine forests. Here we may always come, when we want a drink of nature's stimulant."

But we were not prophets; for even then the pine barons were wondering what to do with their men and their money. They were buying up this same land, in order that they might erect great smelting furnaces on the lakes, and burn up these game forests, pouring the last remains of the dear old giants forth upon the world as blackening, choking smoke; and they built factories where these maples were turned into ill-smelling butter bowls and unromantic forks for handling sour kraut. Then came fires: fires that started in the pine slashings. They raged through the leavings of the hardwood cutter and to-day this little crystal lake is fringed only with dead stumps and blackened, fallen logs.

Hunting is by no means the only sport of this region. There is fishing in a hundred trout streams and a thousand lakes. Michigan's streams differ from those of the East in that their bottoms are not stony. But let no one imagine that therefore they have none of the obstructions which give trout fishing so much of its thrill. There are no worse obstructed streams in the world than some of these.

There is a wide range in the character of streams in this respect. Michigan has few that can be thoroughly fished by one who fears to wade, and she has some too brushy even for good wading. The larger streams have, at one time and another, been used for logging purposes. For this reason they were early cleared of the brush and trees that had during the course of centuries fallen into them. Now they make fine fishing. One can wade over a smooth sandy bottom and cast his fly over deep hole and rushing riffle, with never a fear of brush, unless he awkwardly jerks his leader shoreward and entangles it in one of the overhanging branches. And it is a fact that trout fishing has improved rather than declined. Ten years ago it was a rare thing indeed to take a two-pound trout south of the strait. But now, in these larger streams, which were then mere waterways for floating logs, where no one thought of fishing, two-pound trout are common.

Contrasted with streams of this character are some smaller ones that lumber men have never used. These contain the brush collections of ages. Add to this accumulation the tree tops which later day cedar cutters have slashed into the water, and left to lie, and you have a stream representative of scores that may now be found in Michigan. You can scarcely be said to wade these streams, for you may not progress more than a dozen steps before an aggregation of tree tops bars your progress. You must turn to right or left and worm your way through well nigh impenetrable thickets, or thrash across the brush heaps; in either case you are not wading. Here and there a lot of old logs will have fallen side by side across the water; moss will have covered them and formed a soil from which small bushes are lustily growing. Beneath this the water will entirely disappear from view.

I mention this class of streams because they are reservoirs of trout. The average fisherman does not come here; yet these waters can not well be overfished. Here trout will breed undisturbed and from here will go to keep up the supply in larger, clearer rivers. And there is a peculiar sport, too, in fishing these brushy rivulets. It is not sport that will appeal to one who dreads difficulties or lacks patience, and it is utterly different from trout fishing in a larger



Photo by A. W. Ballard.

A MICHIGAN HUNTING LODGE.

stream that has no logs. He who would practice it must leave the fly behind and take a short, stiff rod. This sounds unorthodox—but try it before you pronounce judgment. You creep through the brush until you reach the stream, and drop into any deep hole that offers. Soon you will have a strike under some log and you will hook your fish. Promptly the trout will wrap your line about a cedar snag, and if it is a big fish, or you are excited, you will be reaching a coat sleeve into the water trying to free the line. Later on you come to a place where an eddy has worn its way under the roots of a big cedar and, through an opening in the moss, you see in the deep whirl below a ten-ounce trout. The cedar brush comes so low you must crawl on hands and knees, wind the line short, put on a heavy sinker and engineer carefully to bring your hook within the fish's reach. He strikes. You have him hooked. Your line acts as though it were fast to a submerged fly wheel, and you can not lift directly up for the same cedar brush. How will you land the trout? I don't know, and neither do you. You must meet the emergency. You must overcome the difficulty. And therein lies the charm of this peculiar fishing. It is sport that you will not like at first, and may never like at all. Then again you may.

I have visited this region, on and off, for many years and have been greatly pleased to watch the evolution of its native sports-

manship. Fifteen years ago dogs were very commonly used for hunting deer and the latter were killed on the runways or in the water. But there was growing up a love for still hunting and when the lumber men went their way the remaining settlers were still hunters. The sight of a southern party coming in with a band of hounds was common for a few seasons, but since they invariably went home some dogs short, the hounds ceased to come. It is not merely because he fears the law that the settler declines to use dogs, and kills the hounds of those who do, but because he has come to feel a pride in deer stalking; because he has to that extent ceased to be a game murderer and has become a sportsman. It is open to discussion if we may not well forgive the native woodsman for killing, now and then, a deer to eat, for by doing away with hounding he has saved by far more than he kills.

The same development, too, has been going on among those who fish. One continually on the ground might not realize the gradual change but it is quite apparent to an occasional visitor. For instance, one resident of a small Michigan town a dozen years ago, found his chief joy in spearing fish. Now if you were to propose a spearing expedition he would be as much offended as if you were to suggest the robbing of a bank. He has never been arrested, nor has he in any other way been made to feel the hand of the law. He merely learned to get sport with hook and

line. Then he began to see that fish slaughter with the spear was wrong, and placed it among the things which no gentleman will do.

Likewise there were many trout fishermen in the Michigan towns who in those days used bait alone, and declared that the fly would never do in those waters. But now and then one tried fly fishing, and to-day they use bait only in brushy streams where there is no room for casting flies. Still better is a sentiment in the matter of keeping undersized fish. Then a man returned from a day's fishing and said, "I caught seventy-five trout." Now he comes in and says, "I caught seventy-five and put back twenty-seven." The putting back of small ones has become a matter of principle, and when a man announces his catch and does not mention the return of fingerlings to the water, he is apt to be looked upon with suspicion.

This growth of sportsmanship is not due to effort on the part of any organization, but arises from natural conditions. It is in the nature of things that men who love sport should love pure sport. A man who never fished before may look at a basket of five-inch trout and feel some sort of sporting thrill. But when a few seasons have rolled around, and he has known the joy of fighting two pounders, the ethics of sport takes hold upon him.

It is to this development, in my mind, that Michigan's bettered sport is largely due. If only a little of it could be instilled into the brigands who come from the smaller cities to shoot in fall, there would be yet further improvement.

As yet very little has been done in the way of game preservation in this State. There are excellent opportunities here, for land may be had for the asking. It is not beautiful land and it has no timber, but it will include pretty lakes, full of pike and

bass, as well as icy trout streams. And among its stumps and second growth will be deer and partridges.

But so long as the game continues to increase it is to be hoped that no extensive preserves will be made, for free land is better than land preserved, just as a preserve is infinitely better than a game-stripped waste. The Turtle Lake Club of Detroit has one preserve near Lake Huron. A modest tract is held by the Fontanalis Club on Lake Superior. The late General John McNulta owned over a thousand acres east of Traverse Bay, and on it placed a thriving trout hatchery. Mr. John H. Bissell, of Detroit, has a large farm and hatchery on the shores of Elk Lake. But this is scarcely a beginning.

In my opinion, the great need in northern Michigan sport is some means of suppressing the raids of outside hunters during their fall invasions. Huckleberry Finn points out that there are some men who can be reformed only by the use of a shotgun. Likewise there are some alleged sportsmen whom nothing less harsh than strict law enforcement will ever keep within bounds. If a good-sized force of salaried wardens could be set to scouring the woods then, with instructions to arrest every man with trout or grayling in his possession; every man who carried dynamite, or spear, or who may be caught "shining" deer, the effect would be good.

There is another need so closely allied to sport that it may be mentioned here. That is work for the restoration of the forests. The State has established a forestry commission which is doing good work. This commission has asked for a large tract of land on Houghton Lake. If its request be granted, and if it is not handicapped by the denial of appropriations, this commission believes it will be able to partly clothe again the black nakedness of these barren plains.

THE OLD AND THE NEW PUGILISM

By Prof. Alf. Austin

(Sometime Lightweight Champion of England.)

VOLUMES have been written in favor of pugilism by its advocates, and as much in its disparagement by its detractors, but like other sports, it is what you make it, "skill and refinement alone rendering it worthy of being classed as an art." It has the capabilities of a manly art, and it may be made one of the coarsest and most brutal of games.

Its primary uses among gentlemen always have been, and always will be, a sport wherein the restrictions constitute the game. Where serious differences arise between men, the boxer's skill would avail but little

when opposed to one armed with a six-shooter and a little nerve. Still a man will develop qualities in the practice of boxing which would serve him in any fight.

Enough has been said of the pugilism practiced in the Spartan games; I mention them only to call attention to the fact that the evolution of boxing has been from the cestus, a weapon with fatal probabilities, to the boxing glove with improbable serious results.

Previous to the introduction of pugilism by James Figg in London, in 1719, we read of one gentleman pitting his footman against another gentleman's footman in a game of buffets; therefore, I conclude that up to that time the sport now called boxing was then known as buffets; giving rise to the old saying "Buffeted about from pillar to post."

Pugilism was, upon its first introduction by Figg, advocated by royalty and the nobility, and such journals as *The Tatler*, *Guardian* and *Craftsman*; not only as a means of developing hardihood, pluck and stamina, but as a means of lessening the use of deadly weapons in personal encounters; and however much we may deprecate pugilistic contests, they are certainly less objectionable than fights with knives, pistols and the like.

Progress in boxing has always been of a restrictive character. The first rules of the ring, formulated by Jack Braughton about 1740, were all prohibitive; kicking, gouging, biting, hitting while down, etc., being respectively ruled out. The same may also be said of the principles of aggression; for at the time of the suppression of prize fighting in the latter part of the year 1860, when pugilism had attained its highest form of art and skill, they were narrowed down to hitting, counter-hitting, ducking, slipping, parrying, and such skilful use of the feet as made them move in harmony with the hands, adding force to the blow, as well as moving the body as rapidly as possible from one place to the other and poising it at the end of each move so as to be able to attack, resist, evade or



TWENTIETH CENTURY PUGILIST IN FIGHTING ATTITUDE.

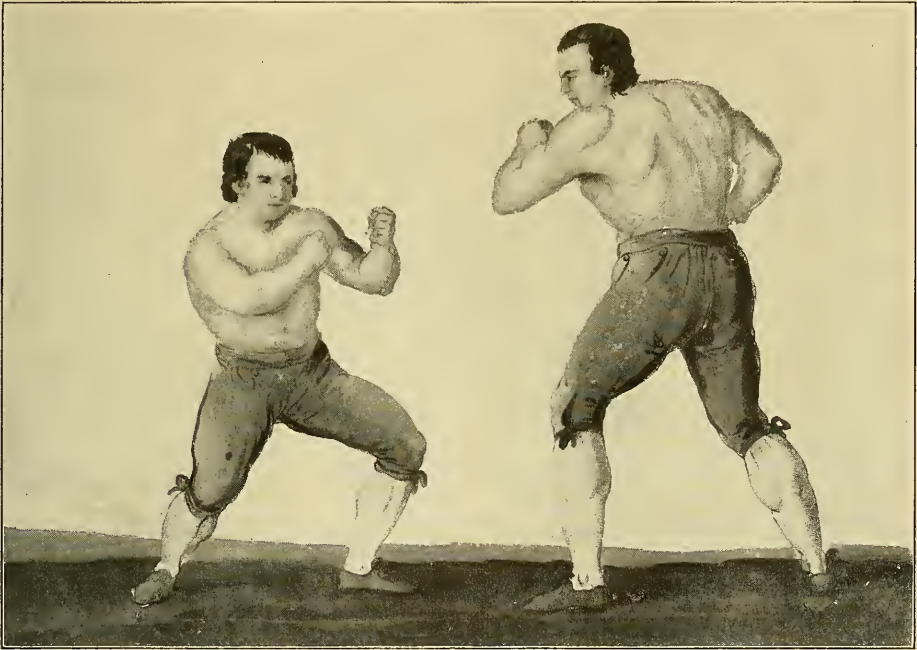
James Jeffries, Champion Heavy Weight of the World.

retreat. In other words the evolution appears to me to have been, from one concerning attitude and style of motion favorable to doing many things badly, to a form adaptable to doing a few things well.

At the time I refer to (forty years ago), or about six months after the memorable fight for the championship of America and England, between Heenan and Sayers, people practiced boxing with gloves that they might fight the better with their bare knuckles; for in those days all serious work was done without gloves. Consequently the style of boxing then in vogue differed

the straight in-and-out piston-rod style of motion, favorable to bare knuckle fighting is more graceful than the rotary style of motion, which the average boxer of to-day has adopted for glove fighting. The second reason is, that in the prize ring days the boxer had a longer and more arduous training than the boxer of to-day. It may interest the reader if I endeavor to describe how professional boxers were made thirty or forty years ago.

When I was in my early teens boxing was the leading sport and pastime in London, and the goal of the successful pugilist



From an old print.

EIGHTEENTH CENTURY.

Thomas Johnson.

Isaac Perrins.

At Banbury, England, October 22, 1789.

from that of to-day wherein men practice in order to acquire skill in fighting with gloved hands.

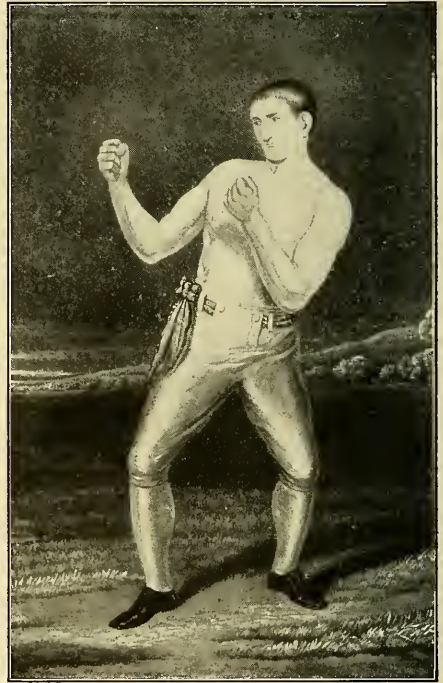
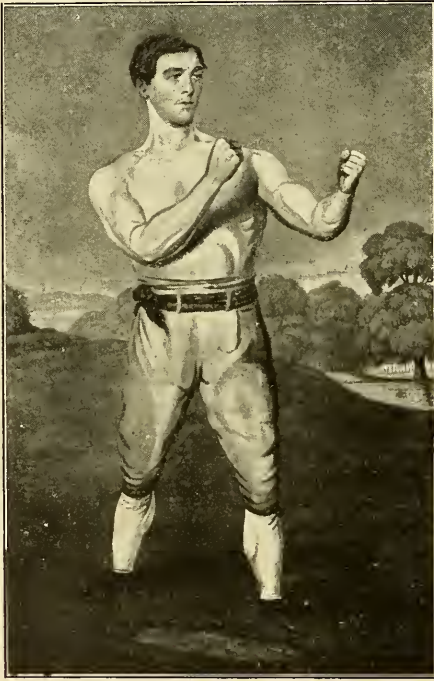
The most noticeable difference between the boxer of to-day and the boxer of thirty-five to forty years ago, is absence in the former of that punctilious regard for attitude and style of motion which characterized his predecessor. The only one I have seen of late years having such style was young Griffo, a light-weight Australian boxer. Two reasons suggest themselves to me for this difference. The first is that

was a sporting public house (liquor store or saloon). They abounded in every part of the town, but were generally in side or back streets, where the house did not command a transient trade. Most of these sporting "pubs" had a large room at the back or upstairs, which was open one night a week (preferably Saturday), for public sparring, which was always conducted by a pugilist of some note. The charge for admission was generally twopence, on payment of which amount one entered and took a seat at one of the drinking tables in the

room. You were expected to buy a drink, or drinks, and use your pleasure about smoking, but I may add, the average person did smoke a clean or a foul clay pipe.

Some of the rooms had a clear space in the center and many had the time-honored ropes and stakes; some on a raised platform or stage. The conductor was master of ceremonies, instructor, and expected to box with any one who cared or had the temerity to tackle him. The rooms were opened at 8 p. m., and in the early evening the conductor's work was to get two—generally young boys—to box for their own

hands and sparred up to each other, the conductor giving them such instructive tips as "Straight with the left, my lads; one hand's as good as the other when you're close." Or, if they were struggling on the ropes or tables, "No throwings," "break away," or, "take the middle, lads." After three rounds of sufficient duration to cause signs of exhaustion, the tobacco smoke helping, the boxers gave way to the next two; the quality of the boys improving as the night wore on, until professionals wound up the evening. The difference between amateur and professional in



From old prints, by courtesy of the New York Racquet and Tennis Club.

NINETEENTH CENTURY.

Deaf Burke,
1828-37.

"Bendigo," Wm. Thompson,
Champion of England, 1837.

practice and the amusement of the spectators. His first difficulty was to find two who were evenly matched in size and ability, the next to persuade either or both to box. Having succeeded, the boys divested themselves of their coats, rolled up their sleeves, and were led to the center of the open space or ring and introduced to the audience—"Gentlemen, these is two friends: time." The last word was the signal to commence, so the boxers shook

these announcements was made by introducing professionals by their names or nicknames. "Gentlemen, this is young Napper and Jimmy Dove: time;" and the professionals took off their shirts. Having boxed the regulation three rounds the spectators were invited to throw coppers (pence or half pence) into the ring for the professionals, or they went around with their caps and collected what the spectators chose to put into them.

The amateur had probably boxed with the boys he ran with before he boxed in sparring rooms. He boxed months and sometimes years "before he took his shirt off" and boxed as a professional; a correspondingly long time before he was considered good enough to be matched for five pounds a side. If he won he was matched for ten pounds a side, and after that twenty-five pounds; and the light weights who fought for more than fifty or a hundred pounds a side could be counted on the tips of one's fingers.

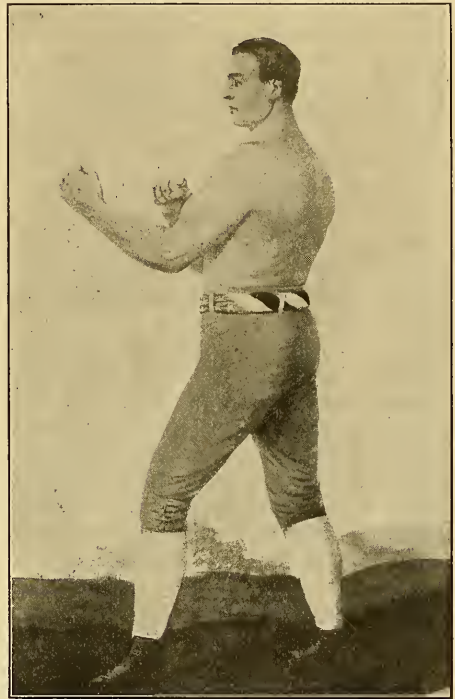
This long training and practice gave finish

During the period that these young fellows were "battling it up" at the "sparring rooms," they were having an occasional fight "for love" or small amounts with others of the same kidney, down the back streets or at Hackney Marshes, Bow Common, Wormwood Scrubs, etc., by arrangement; and I may say, by the way, that I have seen as good a fight for five shillings a side on one of these suburban pieces of verdure as I have for large sums by prominent pugilists. For these small sum combats the principal preparation was as much running, walking and skipping rope exercise, as the



From old prints, by courtesy of the New York Racquet and Tennis Club.

Tom Sayers,
Champion of England, 1859.



"The Benica Boy," John C. Heenan,
Champion of the World, 1860.

NINETEENTH CENTURY.

to a graceful stroke or principle of attitude and style of motion which became natural to the pugilist, and "where nature makes art natural her work is complete."

As a fighter, the pugilist was always at it; for boys and men fought it out anywhere on the lightest provocation. If a young fellow thought he had pugilistic ability, there was no difficulty determining whether his conceit was well founded.

continuance of his ordinary vocations would admit of. He did a little sweating, took some purgative physic, abstained from sugar or butter, tobacco and intoxicants, more or less.

When the prize ring flourished nearly all fights of any importance, except those for the championship, were made at a stipulated weight, and the man who turned the scale at that weight at the appointed

hour the day before the fight, forfeited the stakes.

Every one wanted to get the advantage of a pound or two, and fought as light as possible, consequently the principal and most difficult thing to do was to "get down to weight." This was done by hard work, sweating, diet and limitation of quantity of liquids. Reducing a man from twenty to fifty pounds was not uncommon.

Usually the pugilist and his trainer (and the most prominent was scarce ever known to have more than one), lived at one of the inns attached to the many running (athletic) grounds in the suburbs. After a severe physicing, which was repeated at frequent intervals in consequence of the constipating diet, the customary programme was: Rise at 6 a. m., a glass of sherry and an egg; walk till 8, breakfast till 9; walk till 1; dinner till 2; walk, with an occasional run, till 6; supper till 7; and stroll or sit about till 9 or 10, when to bed. If it rained, or by way of a change, part of the morning or afternoon was spent in skipping (and many pugilists were very clever in the use of the skipping rope), punching the bag, (a sack stuffed with straw hung up in a barn or stable), and using the dumb bells. In those days nothing was known of the many dumb bell exercises that are in vogue now. The pugilists used very light ones, from one to three pounds, and practised punching exercises with them—the straight in-and-out stroke, as used when fighting. The work was made lighter or severer according to the amount of flesh to be got off, but towards the end of the four or six weeks' training, a man would be covering an average of thirty miles a day besides his other exercises. It was a terrible ordeal; the average pugilist would rather go through half a dozen fights than one course of training down to weight. It was all work; for all the time he was resting he was putting on weight. Then the thirst! for a man getting down would be restricted to a pint and a half of liquid a day. He could eat as much as he liked, but that would not be much, for his food was mainly stale bread, cut in slices and put in the oven until dry and crisp, and the lean of chops and steaks. I have seen men get on the scale so weak from thirst and want of food that they could hardly walk. Once the scale passed they might have their fill, but care was taken that they did not eat

bilious foods, or so overload their stomachs as to impair digestion.

Between scaling time, 2 p. m., and fighting time the next morning a man would put on from five to seven pounds.

The London Prize Ring rules called for a higher degree of stamina and endurance of punishment than the glove fight. The bare fist inflicted generally more serious damage than the boxing glove. Again, if dazed from the effects of a blow he could "get down," if not knocked down, the round ending when either man was down; his second would bring him to in time "to scratch" for the next round. Consequently if the contestants were evenly matched, the fight might last until the nervous energy of the men was almost exhausted.

Boxing in those days was called a manly art and the majority of pugilists endeavored to live up to the title of their profession. His manly traits were demonstrated in his abstaining from taking any mean advantage of his adversary in the ring, and his forbearance towards an unprofessional out of it. I have seen pugilists under the most provoking circumstances, refrain from striking men who were not professionals, when pugilistic encounters were of far more common occurrence than they are now.

Whether the modern boxer could beat the old time pugilist would depend very much upon the rules governing the contest. With his bare knuckles and prize ring rules, age and weight equal, it would be a certainty for the pugilist for "in-fighting" and "wrestling" having been ruled out, are as much lost arts as quarterstaff or cudgel play; besides, if less versatile he was a harder man, in consequence of the harder life he led in the open air and the fact that he fought more frequently.

As a man, the boxer of to-day is better paid and in a general way, a better type of man than his predecessor; as is true in comparing the men in other trades or professions half a century ago with those of to-day.

Whether the boxer of to-day knows more tricks or better tricks, than his ancestor is a question that will never be satisfactorily answered; for all the new tricks I have seen, are old tricks with new names: for instance, when James J. Corbett was training for his fight with Bob Fitzsimmons it was reported the latter had some new tricks; one of which being "a false lead

with the left and swing with the right." In the prize ring days the same trick was known as "feint with the left and cross with the right."

The only reliable gauge of the progress of boxing as an art is the obtaining principle of attitude and style of motion.

The difference between the easy and graceful and the awkward and constrained attitude is readily perceptible. The portraits of pugilists of the eighteenth century are all of the former kind and clearly indicate that the boxer's first consideration was protection by the position of his body as well as by guards and parries. At the time of the suppression of the prize ring, the boxing attitude of the average pugilist was a marvel of grace. Taken altogether boxing skill has improved during the past thirty years, but as a sport it seems to have retrograded, owing entirely to the class

of men who have been attracted to the management of "boxing matches" by the money making possibilities.

The sports of the future must serve some useful purpose besides the excitement of the contest and the speculation on the result. The only justifiable basis upon which boxing can be advocated, is as a "means of developing a man's mental and physical powers." While rough and readiness are qualities essential to the sport, they are not of the kind which progressive people would encourage to the detriment of art and manliness. The elevation of the "Manly Art" should be of far greater importance to true lovers of the sport than merely "pulling off" a fight. Until a different class of men take the management of boxing matches, the "art" will be lost in the scramble for dollars.

EUROPEAN FIGURE SKATING

By George Wood

IN Europe there are two distinct schools of figure skating, and two only, though both schools have slight local variations. These are the English and the Continental. Skating, that is to say, straight-ahead skating, seems to have been made fashionable in England by the Royalist exiles returning from Holland at the restoration. Pepys in 1662 notices it, but it was many years before any attempt was made to skate on an edge. In 1772 one Robert Jones described the inside and outside edges, the forward roll, the outside forward 3, and other figures. His treatise is so advanced, however, that he must have had many keen forerunners, of whose practice he made use. On the Continent we find elementary works on figure skating at about the same date, but the art does not seem to have flourished to any great extent until the visit of the American, Jackson Haines, to Germany and Austria in 1864-5. Thanks to the wonderful performances of this skater, a new interest was awakened. In Germany, Austria, Scandinavia, and Russia he produced a great impression, but not so in England,

and he does not seem to have introduced any new movements in the form of rockers, counters, or brackets; these were of later birth. Since the time of Jackson Haines, figure skating has been developed on separate and distinct lines by the English on the one hand, and by the central Europeans on the other; the movements and figures performed are the same in each case, but the methods adopted are entirely distinct, and even opposed to one another.

The broad distinction between the two



A COMBINED FOUR.
First Pair Going Out. Second Pair Arriving at Center.

schools is that the English have laid down as the first rule of good figure skating, that the employed leg must be kept absolutely straight, unbent at the knee; the Continental skaters start with exactly the opposite rule, and insist on the bending of the employed leg.

This difference in the position of the employed leg has logically led up to the other differences in the two styles.

English skates are, as a rule, ground to a radius of either 6 or 7 feet, whereas Continental skates average $5\frac{1}{2}$ feet radius, and are generally made with the blade thicker in the middle than at the extremities, which is equivalent to reducing the radius even more. Consequently equilibrium is much more stable on English skates, and with them the friction between the blades and the ice is much less than it is with the Continental pattern. The English skater therefore adopts a more upright and straight line attitude than the Continental, finding it unnecessary to use either the arms or the unemployed leg to preserve his balance. The Continental skater has to use both, and has to bend his employed knee, more or less; to recover his equilibrium after any movement. With the large radius skate it is as difficult to describe a small

curve as it is to perform large curves with the small radius blades, but with the flatter skates the diminution of speed, once attained, is very gradual, whereas with the Continental skate the loss of pace is very rapid.

Thus it is that Continental skaters perform small intricate figures, making up for their lack of size by variety and delicate execution. The English skaters cannot fashion these small figures, and so take to combined skating, in which, with others, they have opportunity for skating large and fast, doing the "turns," "Mohawks," and so forth at great speed. National temperament also enters the question: the cold-blooded, phlegmatic Englishman has an innate dislike to showing off, and skates for his pleasure only, or for the sake of exercise; the Continental skaters, on the other hand, perform for the gallery, and satisfy themselves by exciting admiration of their skill in others. Thus it is that amongst Continental nations the style of the Swedes approaches nearest to that of the English, while that of the French, more mercurial and with some innate touch of the theatrical, differs the most, smacking to English notions of the acrobatic.



HAND IN HAND SKATING—CONTINENTAL STYLE.

It has been said that the first rule of English skating is that the employed leg must be kept absolutely straight; the body and the employed leg being in a straight line vertically above the bearing surface of the skate. The head held erect, in continuation of the same straight line. Strict rules are laid down for the position of the body itself, for each of the edges.

Generally speaking the body is held flat, that is, the line of the shoulders will be nearly parallel to the employed foot, and the head is carried so that the skater can look along the leading shoulder in the direction of the motion. In making a turn the rule for the body and head is that before the turn they shall be placed as nearly as possible in the position which they should occupy after the turn is made; this ensures stability on the new edge after the turn. The turn itself, whatever it may be, "three," "rocker," "counter," or "bracket," is made by the muscular action of the employed foot, or rather of the employed ankle. By this action the foot is switched round from the old to the new position, the skater balancing nearly on the middle of the blade; generally the contact surface will be slightly in front of the middle for the forward turns, slightly behind for the back turns. The arms are to hang loosely by the side of the body, following, not assisting, its motion. By such a turn very little pace is lost, and by placing the body in correct position for the new edge, before turning, no violent effort is needed to recover equilibrium after the turn.

The Continental skaters adopt entirely different methods in making a turn. In place of the muscular action of the employed ankle, and the quiescence of the unemployed leg, and of the arms as adopted by the English, they use the unemployed leg and the arms as the motive force, the employed foot becoming little more than a pivot on which the turn is made. Pace is made when required by the steady swing of the unemployed leg and of the arms. Figures thus executed are generally known as "kicked-figures;" properly speaking they are "swung-figures." Two general rules may be stated for the Continental method of making a turn. The unemployed foot always performs in mid-air the inverse turn, so to speak, to that actually performed on the ice, and the unemployed leg is always swung steadily from behind to



G. HÜGEL, VIENNA,
WORLD'S CHAMPION,
1898-99-00.



D. SALCHOW, STOCK-
HOLM, EUROPEAN
CHAMPION, 1899-00.

in front, in the direction of the motion, while the skater is traveling on an edge. To illustrate this we will consider an "inside forward bracket turn," executed in the foreign style. The skater starts off on the inside forward edge of the right foot. After the initial stroke the unemployed foot will be behind the employed, but as the skater progresses on the edges, the foot is swung steadily forward and across the employed until the two feet are nearly parallel; both knees are slightly bent, and the unemployed leg is kept at some distance, separated from the employed, with the knee turned outwards, toe downwards. The arms are held away from the body, about waist high, the left arm being drawn somewhat across the body. At the moment when the skater makes the turn he bends the employed knee slightly more than before, and describes in the air with the unemployed foot the figure of an outside forward bracket, at the same time swinging his arms across the body in the direction of his motion. These two motions, of the unemployed leg and of the arms, effect the turn, the skate being the pivot. The skater is now on the outside back edge; his right arm is thrown slightly across his body, his left slightly advanced in the direction of the motion, and his unemployed leg is swung steadily in the direction of the motion away from the side of the employed. The figure represents the movement, the dotted line showing the path of the unemployed foot. (p. 695.)



INSIDE FORWARD EDGE.
HÜGEL.



INSIDE FORWARD EDGE,
ANGLO-SWISS STYLE.



INSIDE FORWARD BRACKET
TURN, JUST BEFORE THE TURN,
CONTINENTAL STYLE. HÜGEL.



FORWARD BRACKET.
SALCHOW.



FORWARD BRACKET TURN,
JUST BEFORE THE TURN.
SALCHOW.



INSIDE BRACKET, BACK EDGE
JUST AFTER "THREE."
ENGLISH STYLE.

If the skater were going to do the same turn in the English style, he would start off on an inside forward edge with his legs touching, the instep of the unemployed against the heel of the employed, arms hanging loosely by his body, shoulders nearly parallel to the employed foot, the right one leading, and head erect looking along his right shoulder in the direction of motion. To prepare for the bracket, he turns his body steadily as far as possible over the employed foot until the left shoulder is leading; the position of the head remains unaltered, and the feet should be kept in contact, the knee of the employed foot being braced up as straight and as rigid as possible. The turn itself is made by slightly swaying the whole body forward onto the toe of the skate and immediately flicking the skate round through an angle of 180 degrees onto the outside back edge; this is done by a muscular effort of the employed leg. The position of the head is still unaltered so that the skater is traveling

backwards, looking along his left, the leading shoulder. The arms follow the motion of the body, swinging steadily and slowly after it until they again hang loosely by the sides. The unemployed foot never moves away from the employed.

As a rule English skaters learn to do all the turns (four 3's, four "rockers," four "counters," and four "brackets,"); threes, two turns, brackets, double brackets to a center; Q's and reverse Q's; Mohawks and Choctaws, though these are steps rather than figures. Of these the Q's are the only ones which can be called "picture figures," so that the English skater, if asked to exhibit, has a somewhat limited repertoire, only experts realizing the difficulties and the varieties of the turns. These turns also are done at high speed and cover a large area of ice so that a spectator hardly notices the turn for the length of the edge before and after it.

As the result of this sameness in his skating the Englishman must needs find

means of adding variety, while yet skating the old turns; this he gets in "combined skating." As may be gathered from the name, "combined skating" means that several skaters perform together. The ordinary number for a combined figure is four men, but as many as sixteen or twenty can skate together, but with large numbers a variation of the ordinary method is used, called "simultaneous combined skating." Taking the typical case of four skaters, the men stand at the four points of the compass round an orange, or some other mark, called the center. Two of them (those facing north and south, for instance) form the first pair, the others (east and west) the second pair. One of the first pair calls the figure to be skated, and he and his partner start off on the same foot, but in opposite directions, crossing one another at the center; both skate exactly the same figure, making the turns and new strokes as nearly as possible at the same moment. Directly the first pair have passed the center the second pair follow suit, skating the

same figure on the same foot, but starting at right angles to the path of the first pair; the turns and strokes they make just after they are made by the first pair. The figure can contain any arrangement of edges and turns, the skaters getting twenty or thirty yards away from the center, traveling for the most part on the circumference of an imaginary circle passing through the center. The figures are so arranged that the skaters eventually return to the center, the first pair crossing one another again, the second pair passing directly after the first pair, as close on their heels as possible. The figure is repeated on the other foot or a new figure is called without any halt at the center. If the four skaters keep square during the progress of the figure, and if the second pair get up to the center really close behind the first pair, the effect is very good indeed.

Every time the four skaters arrive at the center it looks as if there must be a collision, yet somehow each man just misses the others, by a hair's breadth only it seems;



INSIDE BACK LOOP. HÜGEL
JUST BEGINNING TO SPIN.



ENGLISH STYLE. FORWARD
COUNTER, BODY IN CORRECT
POSITION, JUST BEFORE TURN.



THE BEGINNING OF A
"PIROUETTE."
FRENCH STYLE.



INSIDE FORWARD LOOP.
HÜGEL.



FORWARD ROCKER.
SALCHOW.



HAND IN HAND SKATING,
ENGLISH STYLE.

or at the critical moment there is a sharply called "turn" and the skaters are diverging from one another as rapidly as they were converging a moment before the imminent disaster.

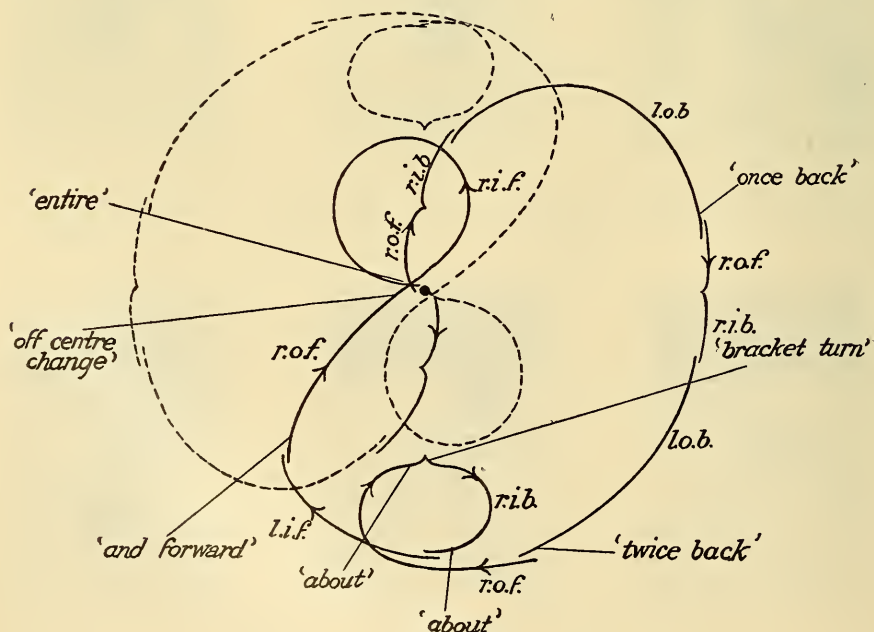
There is a regular system for calling a figure. Usually a figure will open with the call "twice back," by skating which the performers get well away from the center; "once back" means that the skater starts off on an outside forward edge; after traveling three or four yards he turns a three, thus getting into the inside back edge; he then drops on to the outside back edge of the other foot, on which he travels ten or twelve yards; striking off again onto the outside forward edge of the original foot, and performing the figure over again, the skater does "twice back." In the system of "calls" adopted throughout England, "and" always implies a change of foot; "center" means that the skater is to approach the center in such a way that the mark lies outside his curve; "off-center" means that he must approach so that the mark lies inside his curve; "about" means a reversal of direction on the same edge; "forward" means the outside forward edge, the other edges being named e. g., "inside back edge," particular turns are named e. g., "back inside center brack-

et" when the skater would perform the bracket turn at the center.

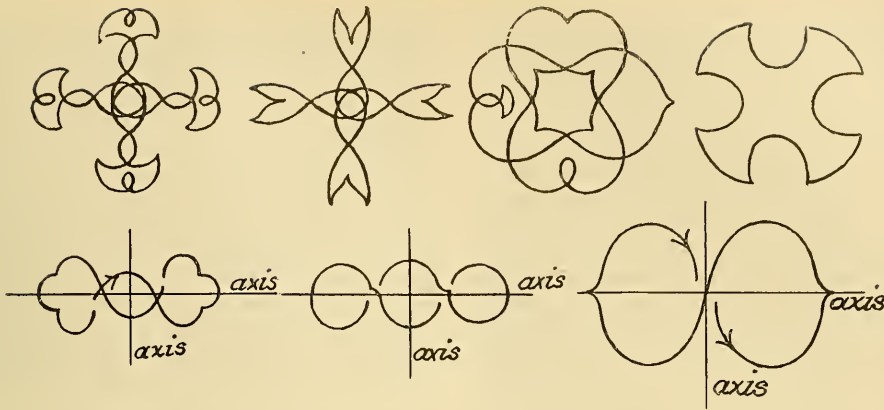
The chief skating clubs in England are: The Skating Club, Wimbledon, London, Tunbridge, Thames Valley, Ipswich, and Oxford; in Scotland the most important is the Edinburgh club, which is the oldest of all, dating back certainly to 1784. All these clubs have their own skating tests, varying in difficulty from the old Edinburgh test "to jump over three top hats placed on the top of one another on the ice," and the Cambridge ladies' test, "to skate across the club ice unassisted," to the present day difficult Wimbledon test.

Owing probably to the want of regular skating in England, artificial rinks have been constructed, notably Niagara and Prince's Club in London, and a rink at Brighton. The ice produced is hard, but cuts up very easily, so that after it has been skated on for any length of time the surface becomes very slow.

The introduction of these rinks have had a good effect in one way, insomuch that many people have learned to skate and have been bitten by a keenness for figure skating which they would have otherwise missed, but on the other hand, the effect on those who can already skate is bad. The rinks are too small, and too



SIMULTANEOUS COMBINED SKATING.



CONTINENTAL SCHOOL FIGURES AND EIGHTS ON AN IMAGINARY AXIS.

crowded to allow of combined figure skating, and there are the same difficulties attending the practice of the "turns" at high speed in the true English form. As the result skaters take to performing picture-figures and have adopted a hybrid and ugly style of skating, neither English nor pure Continental.

The figures executed by Continental skaters are of every kind, chiefly one-footed; they comprise toe-spins, pirouettes, jumps (which are not considered legitimate figures by some Continental schools), grapevines, and beautiful arrangements of "loops," "turns," and "pig-ears." All these latter figures, picture figures, are done on a small scale, whereby they can be appreciated the more easily by the spectators; many of them are named after the skaters who first invented them, and are recognized generally by these names, such as Engelmann's star, Hgel's spin, and many others. While a really good Continental skater is performing, the onlooker is astonished at the skater's grace and rhythmical motion; the body bends and sways in beautiful curves, while the arms and unemployed leg swing in graceful emphasis of the body's motion. On examining the marks left on the ice, one marvels at the extraordinary accuracy of the skating; the figures are wonderfully square and symmetrical, the corresponding parts being made almost exactly the same size. In fact they are skated almost as accurately as they can be drawn.

The difference between the two schools, English and Continental, is very marked when their exponents are skating to music.

The Englishman is unaccustomed to skate "on his own" to music, but performs on these occasions hand-in-hand figures with one or more skaters, "scuds," as they are called. The Continental skater also performs hand-in-hand, but, in addition, has a large selection of dance steps which he skates alone, keeping perfect time with the music, his body swaying this way or that with beautiful rhythm: his hand-in-hand figures are of the non-progressive type, where the skaters continually go over the same ground tracing pretty combinations of circling figures on the ice. With the English much ground is covered in their "scuds," the skating being remarkable for pace and dash rather than for grace. Of these figures there are an endless variety, introducing the "turns," "Mohawks," and "Choctaws," to be skated by two or more people.

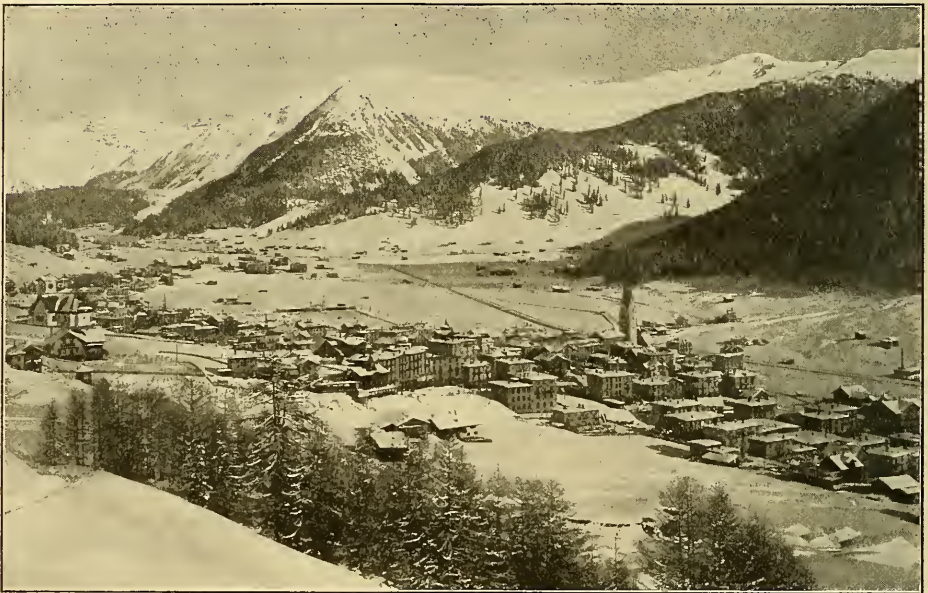
Throughout the Continent a certain set of figures—the school figures—are recognized as the correct training for a skater. These comprise nearly every possible arrangement of the "serpentines," "loops," and "turns"; as an example of one of these we take the continuous bracket figure, *Gegendreier-schlangenbogen-gegendreier*.

The skater starts on an outside forward edge of the right foot and makes a bracket, returning to his starting point on the inside back edge; there he makes a serpentine getting on to the outside back edge, and then again makes a bracket turn coming back to the center on the inside forward edge; the skater then performs the same figure on the left foot, starting on the inside edge forward. The two halves of the

eight are to be made the same size and the turns are to be symmetrically placed opposite one another on an imaginary axis dividing the figure equally; the serpentines must be symmetrical with respect to a second imaginary axis at right angles to the first. These imaginary axes enter in all the school figures, so that all are expected to be symmetrical, with the two halves of the figures similar and similarly placed.

The school figures are accepted throughout the Continent, but this does not mean that there is one and only one Continental style of skating. In the main all Continental skaters adopt the same methods,

actually the style of one or the other of these; Munich follows Stockholm; Berlin, Pesth, and St. Petersburg follow Vienna. It may be that in the course of time one unalterable standard will be laid down, to be aimed at by all Continental skaters, complete and defined as to the smallest points of the art; for during the last two or three years the Swedish skaters have learned and assimilated something of the Viennese and *vice versa*. At first this interchange was one of figures only, independent of the methods adopted in performing these figures, but now the styles also are becoming intermingled, each find-



DAVOS, SWITZERLAND, WHERE CONTINENTAL CHAMPIONSHIPS ARE CONTESTED.

but just as English skaters differ on the correct carriage of the unemployed leg, and on some other minor points, so the Continental schools are not all agreed on certain points; each school adds some particular detail to the commonly adopted general methods. In central Europe the most important skating centers are Stockholm, Berlin, Munich, Vienna, and Buda-Pesth.

Berlin and Buda-Pesth have not produced any skaters of the first rank during the last few years, and practically the number of differing schools is reduced to two, the Swedish and the Viennese, since the other clubs imitate more or less ex-

actly the style of one or the other of these; was advisable, as making the performance of these figures the more easy.

At the present time the most famous representatives of these two schools of figure skating are Ulrich Salchow of Stockholm, European champion 1899, 1900, and Gustav Hgel of Vienna, world's champion for 1898, 1899, 1900; indeed, these two skaters may be said to stand unrivalled by any other of any school whatsoever.

The chief difference between the Swedish and Viennese schools is this: The Swedish skaters judge of the performance of any given figure by the marks left on the ice, the Viennese by the grace and apparent

ease of the skater himself, and not so much by his results on the ice. The Viennese include, as skating, only such figures as in the making the skater never leaves the ice; the Swedes include jumps, in which the skater leaves the ice altogether. Thus it is that the Viennese are more mannered in their skating than the Swedes; exact rules being laid down for the position of the body, arms, unemployed leg, head, and hands, by following which the skater may arrive at the most graceful attitude. Grace the Viennese skaters do attain to a very marked degree, but it is at some sacrifice of size, boldness, and, except with the very best performers, of accuracy; dash they have, this being consistent with grace. The Swedes skate larger, and therefore more quietly, gracefully, but with a more subdued and less rhythmical grace. The accuracy of their skating is astonishing; the placing of turns and loops being perfect, and the actual turns are made on true edges. The dash of the Swedish skater is shown in his jumps, but then it is a question as to whether such figures should be called skating. At the same time the Swedish skater is evidently more careless of the position of his members, and at times, in his effort to make a perfectly true turn, may look actually ungraceful.

Apart from the school figures, the Swedes practise picture figures to a large extent, indifferent as to their own appearance, so long as the figure made on the ice is perfect; these picture figures the Viennese consider injurious, spoiling a skater's form, and although they can, and do sometimes, skate such figures, they prefer elaborate and difficult dance steps, wherein there is full scope for graceful motion of the body; the performance of these dance steps is judged of by the general effect of the skat-

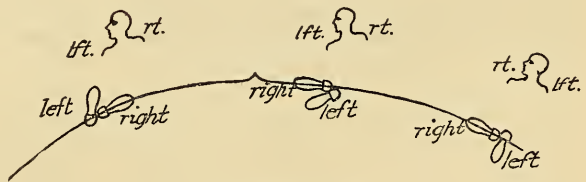
ing, not by the excellence of the individual steps; if the skating is graceful and appears easy and effortless it is good; if there is any appearance of effort or if it appears ungraceful, it is bad.

The school figures have been drawn up by the International Skating Union, under whose management are held all skating championships on the Continent. Corresponding in some way to this body there is in England the National Skating Association, but there has never been an English figure-skating championship. The N. S. A. has done much towards encouraging English skating by introducing three skating tests, which can be attempted before competent judges by all members of the association, the successful candidates receiving medals. These tests are of progressive difficulty.

One branch of the English school is known as the Anglo-Swiss school of skating. At St. Moritz, Davos, and Grindelwald in Switzerland there is certainty of skating from the beginning of December until the end of March, and thither English enthusiasts go to practise their favorite sport. At all three places English skating clubs have been formed, with more or less severe tests; in addition opportunities have been afforded there for passing the N. S. A. tests. Generally speaking, the Anglo-Swiss school is more mannered than the pure English school, laying down strict rules of good style in skating, and paying much attention to small details. At these Swiss resorts combined skating also is much practised, and much has been done in extending and adding to this form of figure skating. At Davos there is additional incentive, since it has become a recognized training ground for many of the best European figure skaters in the Con-



FOREIGN STYLE.



ENGLISH STYLE.

INSIDE FORWARD BRACKET TURN.

tinental style; thus English skaters have opportunity of studying the methods of other nations, much to their own advantage in the matter of continuous and picture-figure skating.

Skating competitions have found but little favor in England, but for the last eight or nine years there has been an English style competition at Davos, which has proved a great success. The competition includes a selection from the turns to be done at high speed at a fixed center, and a certain number of combined figures. These the competitors hear for the first time, when they are called on to skate them; lots are drawn to arrange who skates with whom, two skaters performing together. This Bowl Competition, as it is called, has encouraged first-class skaters to keep in regular practice, and gives the younger skaters something to work for in addition to the N. S. A. tests.

The big skating event of each year is the World's Championship under the management of the I. S. U. This body names the date and the place at which the competition shall take place, and selects judges, as representative as possible of all the nations belonging to the union. Davos has been fortunate in being the place chosen somewhat frequently of late years; properly each nation in turn is supposed to have the honor of entertaining the champions, but bad weather frequently necessitates an alteration. There must be five judges at least; these mark independently, each judge placing his men according to his own marks. At the end that competitor who is placed first by a majority of the judges takes the title World's Champion, even though on the total of the marks he may not be first.

The actual competition is in two parts: In the first are a selection from the school figures, eight or nine in number; in the second part each skater is allowed five minutes during which time he performs whatever he thinks fit. Viennese and Berlin skaters will, as a rule, spend a good deal of their time doing dance steps, and spins;

Swedes and Munich skaters will exhibit jumps and picture figures.

In addition to the World's Championship there is also the European Championship, conducted in exactly the same way and bringing out probably the same competitors that competed in the greater event. It is partly owing to this frequent competition that Continental skaters of different schools are beginning to modify their own peculiarities and are gradually adopting one common style, for a competitor finds that his rival gains on some particular figure and at once sets himself to learn that figure in his rival's style. This is an excellent thing, since in time, it may lead to the adoption of one fixed general standard throughout Europe, so far as the particular class of figures performed by the Continental skaters are concerned. English skaters will also, it is to be hoped, adopt this style where necessary, though for their own specialty—combined skating—their straight knee style is the only possible and correct one.

There is one more point of difference between the English and Continental skaters which is not without importance—that of dress. At one period in England combined-figure skaters performed in top hats and tail coats; those days have passed, and all is nowadays for comfort and for ease, with considerable loss, it must be said, in appearance. The Englishman chooses the perhaps most comfortable costume, but certainly the most inelegant; the curves of the body are hid by a loose jacket, and the legs are disguised in loose trousers or in knickerbockers. The garments flap hideously around the skater as he progresses. The Continental skater wears either tights (if nature has been kind) with a close-fitting, high-necked coat, or else high boots of the Hessian type with close-fitting trousers. Thus every line of the figure is shown, and attention is called to every graceful curve as the body sways this way or that. It is clothing the body so that it appears at its best in its exercise of the art of figure skating.

THREE DYNASTIES ON TIGER-TAIL

By Leonora Beck Ellis

THE late war between Spain and the United States had barely been declared when a message was wired from Fort Myers, Florida, to Washington, which gave rise to this brief paragraph in the Associated Press columns: "Billy Bowlegs and Tommy Tiger-Tail, with two companies of Seminoles from the Everglades, have asked permission to join the United States troops against Spain." Many glanced at the paragraph with indifference; a few thought that the Indians were growing devoted patriots; while here and there a man read the sentence thoughtfully, and perhaps twice over, and recalled the prowess of old Aripéka and his contemporaries, the ancestors of these volunteers from the Everglades; and the fierce valor of the renowned Indians of Tiger-Tail Island. Glancing back down the long vista of years he saw the Spaniard wrestling from the Seminole, through treachery and slaughter, stretch after stretch of the fair Floridian shores, lake after lake, forest after forest, island after island. From the landing of Narváez, back in a past that is well-nigh traditional, down to their last day on the peninsula, no page can be turned that records aught save cruelty from the Spaniard to the Indian—cruelty more savage than is dealt by savages. It is not strange that hatred of the Spanish race, and a burning desire for vengeance, are the strongest traits heredity bestows upon the descendants of Hirrhigua and Aripéka.

The western coast of Florida is peculiarly interesting in connection with the relations of these two races; for here the earliest atrocities were committed by the one, and here the latest stand was made by the other. Though centuries have passed since the lateen sails of De Soto and Narváez brought the first white man's shallop to Tampa Bay, the green translucent waters show the same placid beauty now as then; the giant live oaks still trail their gray festoons; the warm gulf tide yet beats near at hand; the tropic breath of an eternal June fans the shores, and by night the Southern Cross lifts up that great, golden star which

the old cavaliers must have gazed on as some wondrous sky beacon. These are nature's indelible marks, unchanging through the ages, because there can never be a need to alter perfection. But, beyond these, what marvelous changes have been wrought! Populous towns and cities are here, traffic, progress, advancement! while a mighty armament greeted the late-coming Spaniard, where the earlier found only the wigwams and dug-outs of a scattered and primitive people, destined to sink away before rapine, and a cruelty with which they could not cope.

Two days' fair sailing from Tampa Bay northward along the coast will bring one to the mouth of the Homosassa, the Indian "River of Fish." This is a conspicuously beautiful stream, measuring only twelve miles from its cradle in those great sparkling springs or lakelets under the magnolias and laurels, to its union with the gulf, in a gleaming splendor of jewel-like islands. Its source supplies it with so goodly a volume of water that it does not need to go through the phases of brook and rivulet before it becomes a broad, fair river, sweeping down to the fulfilment of its destiny between banks that rise protectingly above it; not lying flat, sodden, and marshy as with many Florida streams. Its bed is chiefly white sand, or lime rock, with occasional short stretches of loam, hidden by the lush water grasses that swing and sway in ever-shifting mosaics.

The waters are of such wonderful limpidity that, gliding over them and gazing steadfastly into their depths—where you can see the shadowy bass and sheepshead, the scintillant trout and mackerel moving in happy myriads through crystalline chambers, across green, white, and golden floors—you feel this to be a dream river, yourself but part of a sleep romance. Lift your eyes for re-assurance, and they are gladdened by the beauty of shore and island. The vivid foliage and voluptuous bloom of magnolia and bay recede, only to make room for stately oak, beech, and pine; these to be



THE LAST CHIEF TIGER-TAIL,
GREAT GRANDSON OF THE FIRST RENOWNED
CHIEF OF THAT NAME.

succeeded by deep-reaching hammocks whose luxuriance of growth furnishes covert for the deer, bear, and wild cat. Then come the slight lime bluffs, and your gaze lifts to the sky, seen through a fringe of palm and palmetto. A mile-long line of great sheltering cedars will come next, and it will push amiably straight on through a magnificent forest of live oaks. The river, always of considerable breadth as well as depth, is constantly dallying to embrace exquisite tiny isles of palm, jessamine, and myrtle.

But five miles before it reaches the Gulf, the main stream is divided by an island that is large enough to be taken seriously. This is Tiger-Tail, and three dynasties have lorded it over those pleasant woods and waters. Barely twenty acres in extent, the little strip of earth has received an impress from three very notable phases of America's development. The vast mysterious shell-mounds along its shores, the singularly abundant spear and arrowheads, drills, plummets and flint tomahawks, found among its stones, are the latest lingering traces of the first régime. A few strongly built cisterns and vaults, some heaps of decaying masonry, and a row of ancient cedar-wood cabins, with wide fireplaces, and vestiges of pothooks, stay the vanishing of the second. But the third?—there is an animated group coming and going about a trio of tents, while rods, reels, gamebags, cameras, Winchesters, lunch-baskets, portfolios, and cases of seltzer-water are mingled in gay confusion. Could plainer answer be made?

When the Spaniard, with his strong forces and equipment, had thinned the ranks of the Seminole, until only a few haughty, silently suffering chiefs were left, each with his handful of followers; and when the Latins had beaten these back foot by foot until little remained to them of their beautiful and beloved Florida, save the quagmires of the Great Morass and the miasmatic covert of the Everglades, one warrior of mighty body and heart invoked his god and his retainers to help him hold his favorite hunting-ground forever against the invaders. This chief was known as Tiger-Tail; a name as honorably won and proudly borne as that of *Cœur de Leon*. His favorite hunting-ground was an island in the

River of Fish, destined thenceforth to bear his own name and become an object of historic as well as picturesque interest.

Many advantages conspired to fit that little spot of earth to be the final stronghold of a courageous but defeated and vanishing people. Its food resources were great: the circling waters teemed with fish, oysters, clams, mussels, conchs, tur-

rels and hares to feed many men through long sieges; while beyond the narrower branch of the river the main shore ran out in a similar but much vaster jungle, and was similarly populated, with numerous black bear superadded.

A hunt there, when the scouts proclaimed the enemy distant, would often lay up many months' store of meat. The



RUINS OF THE OLD YULEE SUGAR MILL.
SECOND DYNASTY.

tles and porpoise. At low tide, excellent drinking water could be had from the adjacent creek. It was densely wooded, especially upon its western half, which was scarcely more than a jungle of cedar, cabbage palmetto, and bamboo, woven together impenetrably in places by stout sea grape and trumpet vines.

In this deep lair dwelt enough deer, opossums, raccoons, wild turkeys, squir-

rels and adjacent coasts bore a spontaneous and abundant crop of fruits, nuts, esculent roots and herbs, and the squaws diligently cultivated their thrifty patches of maize.

The position was also extremely advantageous for defensive, and at times offensive, warfare. So small a spot, situated in a very broad and open river, was easily guarded; half of it being impenetrable to

any but wild beasts and Indians, the other half required but few to watch it. Thus it was a simple matter for Tiger-Tail and his scanty band to keep back large forces of the enemy. Twice, if no more,

kinsmen. But the warrior's time came to die. Even to that fierce soul in its parting moments it must have been a joy to know that he was dying within the realm his valor had maintained against



ABANDONED CABINS OF THE OLD YULEE PLANTATION.

when the latter were off guard—once far up the stream, and once many miles inland—the Seminoles silently stole to the hostile camp by night and satisfied, in some part, the thirst for vengeance on those who had robbed them of their native land and

every attack, and that no Spanish hand had driven the final dart.

When Tiger-Tail had passed away, other chiefs arose, but none of his spirit and mold. In a few brief years those of his people who had not followed him, were

in the morasses and everglades, while his island kingdom was a recognized portion of the new State of Florida, which had been ceded by the Spaniards to the United States of America.

A new dynasty, the second, had arisen upon the island. David L. Yulee, whose name the United States Senate was one day to ring with, was a Floridian, and at home a king in all but name. Six thousand acres in one tract upon the Homosassa and inland, a veritable principality acknowledged his lordship; and of all the six thousand, he looked on Tiger-Tail Island as the jewel; and there he built his favorite residence, erecting on the eastern side of the island, in a palm grove, the cedar cabins of his household slaves. Two miles up the river, a few yards from the site of the present Homosassa Inn, was the landing from which he visited his vast sugar-plantation, the largest at that time in the United States. Here in sugar season, a thousand slaves were employed; and though that dynasty, too, has passed away, a row of cabins a mile inland fronting a wondrously beautiful grove of moss-draped live oaks and feathery date palms, still marks the site of the principal "quarters;" while near at hand the wreck of a sugar mill, with lusty maple trees grown out of its huge boilers, makes a picturesque ruin visited by many sightseers.

Thus, on Tiger-Tail, with his magnificent principality lying just across the silvery stream, lived Yulee, like an Eastern potentate among his countless slaves. His great mansion, amid orange and pomegranate groves, was sumptuously appointed and many guests of renown, from this country and Europe, visited the island

prince and admired the splendor, as well as the picturesqueness, of his living.

He it was that organized the "Florida Railway and Navigation Co.," building what is now known as the Florida Central and Peninsular Railroad—chiefly, he said, to have better facilities for his own travel and that of his friends—and secondarily to haul his sugar to the markets.

An old canal way linking the Homosassa river to the little Homosassa still stands opposite Tiger-Tail, the reminder of a curious little incident of our Civil War. A Federal gunboat was lying just inside the Homosassa, waiting for Yulee's slaves to be brought down, while those same slaves were being conveyed by night, through a canal of their own constructing, to their master's large schooners anchored in the Gulf north of the blockaded point. The slaves were captured at Cedar Key and thence transported to New Orleans.

But the magnificence of Yulee, like the forlorn courage of the Seminole chief, had its day and passed—the second régime ended. The Southern lord has long been dead; and his palatial home, ravaged by fire, fell, many years ago, into decay and ruin.

Four years ago, a fine old century plant, a veritable giant, bloomed upon Tiger-Tail, sending up a tall shaft radiantly flowered. It stood beside the ruined portal of Senator Yulee's home. In its earlier unfolding, the red chief had often rested his stern and somber eyes upon it. But this one flower of a hundred years, came neither to gladden the sovereign of the wilderness, nor to crown the splendid luxury of the old South's aristocratic home: it came to delight the sportsman, the third dynastic lord of Tiger-Tail.

THE WINTER'S WILL

By Arthur Ketchum

The Winter's will the Northwind's sword fulfils;
His henchman, Frost, in pity will not spare.
All gaunt and stark he strips the conquered hills,
And holds them in his rigid grip, all bare.

GOOSE SHOOTING ON THE GULF COAST

By Emerson Hough

A WAY down south in Dixie there is a land which is part salt marsh and part salt water, part French and part Spanish, part American and part otherwise. In this uncertain country there is a dividing line, also uncertain. On one side of this line they call a bluebill a "do-gree" (*dos gris*—"gray-back"); on the other side they may call a bluebill by his Northern name, or include him under the general term of *patos*, since, in the far Southwest, man becomes too lazy to specify very strenuously. West from New Orleans reaches the patois of the Acadian market hunters, who live amphibiously in the slimy marshes of the Gulf Coast, and eastward from old Mexico stretches the speech of Spain, of men too lazy to hunt for market, and too tired to particularize.

At the meeting place of the two speeches there is good winter shooting for wild fowl. From France to Spain on the Gulf Coast is a long sail by centerboarder, and all of it is over paradise. Not the celebrated "sportsman's paradise"—the use of which term ought to make one fear a sudden retribution—but an actual paradise for wild fowl. The narrow keys of that low-lying coast—the same coast where the waves swallowed up the fated City of Galveston—run for hundreds of miles irregularly parallel to the mainland, and between these keys and the main shore there extend wide and shallow bays, full of feed such as all wild fowl love. There are short and juicy grasses that grow on the tidal flats, whereon redheads feed till they become fat, and as tasteful as any canvasback that ever lived. There are little fishes and crustaceans for certain water folk which stand on their heads as comfortably as they float on an even keel. Inland there are wide arms, and lakes of shallow water, full of the wild celery, most prized of all food for water fowl. Grasses shed their seeds betimes, and here and there an acorn grove shows mast for fowl as well as swine. Inland some miles, more or less as the case may be, there are fresh water *lagunas*, where daily the wild fowl find that fresh water which they must have every day, no

matter how closely they cling to the salt water at other times. Moreover, here is a climate which allows the little negro boys to run barefoot at Christmas time. Here, sometimes near the wild celery ponds, the oranges hang on the trees until late in December. Over it all there is the sense of calm and restfulness. Surely this is paradise, and sure it is that here come, from the far North, on their mysterious annual journey, all the legions of the fowl seeking a winter home. From November till February, the coast marshes are lined or filled with thousands upon thousands of joyous, squawking fowl, exulting in their emancipation from the icy North. The wild fowl, as well as we, have their Alps and Yellowstones, and their Rivas as well.

Marsh ducks by millions—"puddle ducks" they call them on the coast; and they do not shoot them, because they are too common to find a market—mallards, pintails, teal, all the shallow water species live among the marshes that break back inland from the main coast. A little farther out, toward the salt or brackish waters, range the redheads, the bluebills, canvasbacks and others of the deep water ducks. Sometimes upon one of the little keys or islands you may find an arm or creek of partly fresh water running back inland for a mile or more. The spot is heralded a mile distant by the ceaseless babel of the gathered legions. The wild bugling of the tall white crane is heard at times, and again that soft, sweet, indescribably musical and strangely sad note of the great wild swan. In steady chorus rises the ceaseless squawking of Mother Mallard, exceeding fat and much content with life. Along the beach run flocks of willets, and avocets, and godwits, all the common shore birds. The place is alive with countless busy life. These hidden wayfarers know that for a time they have reached a place of safety. There are some sportsmen—who, however, do not dwell in Texas—who think that all the wild fowl should be left unmolested on the Gulf Coast throughout the winter. Be that as it may, these legions show a certain

canniness of their own in self protection. Anchor off the key, and bombard the place too steadily for a few days, and presently you shall find them haunting another distant resort, which you must find before you can trouble them.

Now, along these little bays and arms and brackish ponds, and especially at times along the great sand bars which line the shores upon the one side or other of the wide shallow bays, there may at times be seen myriads of those noble and wary fowls, the wild geese, most difficult of all the game to beguile within reach of the gun. Here, as on the burned fields of the North, these birds show their ancient intellect. It is for the silly, shallow feeders to grow suddenly fatuous in this mild and mellow air. Monsieur Honker takes no chances. You will mark his resting place to be far out on some bar, where not even a rifle shot may reach the close-packed ranks, and where approach by land or water would be detected long before a shooter could come within range. You sail, for instance, in your little hunting schooner along the coast until you find a little narrow neck opening into some bay, where you know there is celery and where you wish to do some business with the canvasbacks. As you feel for the channel going in, you note this bar, the wash of the inner bay, spread out flat and far on one side or other of the opening. The long dark line a mile away is, by the glass, determined to be a mass of geese. Not the foolish white geese—these are milling around in their own way, much further inland, a thousand in a flock, over some bit of sweet short grass, which they have found at the edge of the sea marsh. This dark line on the sand bar is made up of the real honkers, the brown-backed, white-throated Canada geese themselves.

The schooner feels its way in the shallow bay, and at last comes to anchor. The duck boats put out for the blinds, which will be seen already built in the open water, made with poles thrust deep into the soft mud, and with brush interwoven about the frame, so that a boat may be run inside the blind and there sit comfortably in quite a heavy sea.

It is perhaps near noon, and the shooters do not find so much to do in the duck blinds as they will later in the day. Over all the quiet scene, weirdly attractive and fascinating, with that strange sug-

gestiveness of all marsh landscapes, the warm Texas sun shines down, mellowing every impulse of the human heart. The sweaters are removed. The shooters lounge on the boat floors, or on the sand of the near by shore. The languor of the air enters the blood. The guns are idle. On the mast of the little schooner the tiny little burgee flaps but infrequently. The brooding spell of a winter that is warm spreads over everything.

Suddenly there is heard, far off, indistinct, so that at first the direction cannot be determined, the distant voice of traveling fowl, soft, vague, indistinct but unmistakable. Into it there comes the nasal note of the honker; *ongh-ongh-ah-ook!* Every man suddenly sits up.

The thin distant line which is now sought for by all will not, at this hour, be seen coming from the sea. The old goose hunters of the party know this, though it may be the first time they ever saw this little bay. They know very well that here, as well as in the North, a wild goose is as methodical as a clock. This is a part of the first flight coming in for the noon rest, and the place to look for them, therefore, is inland, and not toward the sea. And there they are at last spied out, a thin waving line, dipping and rising, and spreading and extending, and all the time growing bigger and blacker, and all the time coming on.

They come on, and be sure they do not hug the rush lined shores of the little bay, nor do they cross it direct, for even then they must pass one spot where an enemy might hide. No, they circle inland, over the little trickle of water which runs into the head of the bay, and then out towards the neck where the bay debouches. Here they cross the main land at just that point where the land is highest and the ground most bare. As it happens, this is a headland where the cattle have been wont to roam for ages. It is a shallow, barren soil, carrying nothing but a wiry gray grass, harsh as the hair on a terrier's back. Not a tree, not a shrub, not even a scraggy cactus stands anywhere above the even surface. Here and there the hard face of the soil is cut with deep little cowpaths, which break down from the high ground to the flat sands where the brackish water seeps out from the bay.

"Well, wouldn't that excite your pity?" says the old goose hunter, who has learned

these things, after watching the flock finally drop and skim off even with the salt water, in the direction of the distant sand bar. "There ought to be pity, not for the geese, but for us. Trust a goose to furnish brains! Now, here we are. In two hours there will be a million geese over here, and there isn't a spear of grass to hide a jackrabbit! Oh, you wait till two o'clock, and you'll be seeing things! Just you wait."

"Why," says one unacquainted with life, "we can cut grass and things, easy enough, and build a row of blinds clear across this place."

"Yes, so we could," says the older man, sweetly. "We could also send to the boat for the dinner horn. We could build fires, and send up a pillar of cloud by day. We could stand up here in a row, like an army with banners, if we wanted to. There are indeed a great many nice things which we could do, if we wanted to advise these old boys to get around some other way. But, as I take it, we want to get some of 'em, not merely to amuse them, or to show once more to goosedom that man is but a worm alongside of a gander that talks bass."

Lapsing into silence, the leader of the party, himself a man who talks bass, wanders away, distraught, across this barefaced bluff, with hands in his pockets and eyes cast down, but none the less engaged in thought. He scans every foot of the ground carefully, and at last he gets his cue. Stooping down, he looks along the surface of the ground. "Oh, Jimmie!" he calls out, "get over there and lie down in one of those cowpaths." Jimmie does so, but sticks up an inquiring head. "Oh, get down, squeeze yourself flat, there! Get your gun down by you now, and lie still for a while."

He goes away and looks from different distances at the figure prone in the gullied-out path; and then he goes back to the party at the edge of the bay,

"Get into the boats," he orders, "every man jack of you, and pull to the schooner for grub. In less than an hour we've got to be back here."

It is done as commanded, for in a large hunting party there must be a leader, as in the German, or in a cavalry charge, in the wheat pit, or the counting room. Half past one o'clock sees the whole party strung across the face of the bluff, each

man hugging the bottom of a cow path as closely as he can. Two men are peremptorily dismissed, as being evidently not built for this sort of concealment. "You are excused for cause," says the leader.

Now again, at about the hour of two, there comes once more a thin, far-off trumpeting of the fowl, this time more varied and discordant than before. A shiver goes over the novices as they hear this sound. All the delicious thrill, unknown save to the sportsman's soul, comes creeping along the spine; the blood tingles the faster in the skin, the eyes shine in their sockets, the hand grips tighter on the walnut, and the finger shifts uneasily about along the trigger guard. The leader knows how these men are feeling, and he calls out his last word of caution.

"Lay low, keep down, and WAIT!"

According to arrangement, all now becomes silent. There is an awful time, a few minutes, each of which seems an hour. The heart of each man screwed down into the sand is beating high as this wild pealing summons, strangely and thrillingly sweet and stirring, comes on and on. The vagrom wind tosses little waves of bitter dust into eye and nose, and toys with loose ends of neckscarf or whistle cord; but faithful to his oath, each man lies low.

All at once the myriad honkings blend into one confused roar, which on the instant trebles in its volume. The flight has reached the edge of the bluff, has risen to its top, and passed over it. The birds are now three or four hundred yards away, but they sound as though they were just at hand. "Good God!" mutters the leading hunter; for on the far left he sees a sudden screaming uprise of the flank of the oncoming army. Some one has been unable to stand it. Fearing that he would die if he could not bring at least a corner of his eye to bear, he has turned over in his cowpath.

The leader does as all should have done. He lies like a stone, gazing up straight into the blue sky, and looking neither to the right nor left. His seasoned ear is telling the story to him. It is a hundred yards; too far. It is sixty yards; too far. It is fifty yards; close enough, but they are coming closer.

And now out of the corner of his eye he sees a great and splendid sight. An enormous body of fowl appears directly above him. A mass of brown and white and gray

and black, all mingled, all passing and re-passing, rising and falling, stretching out their necks, bending down their heads, curving their wings, and calling, calling, calling. A shiver runs through even the hardened nerves of the old-timer. He has stopped geese at forty yards over the decoys, but here he can almost touch them with his hands! They are directly over him! Now!

He sits up swiftly, and then steadies himself, for he sees that there is time. His quick glance picks the blackest and biggest birds for his aim, and following up his first two rapid shots he quickly shoves in another shell. It was nearly too late, for already the wind has caught the upturned pinions. Yet to his own gun there are three great birds down, and there goes a fourth, curving its wings and settling down slowly into the water of the bay.

The shots of the leader make the appointed signal. Look, the whole line has risen from its partial burial place. One—two; one—two, come the repeated sounds of shots from one end of the firing line to the other. The vast throng of the wild geese is confused and turns back, to meet a second volley from those nearest to the edge of the bluff. It rises, assembles, and then solemnly and with dignity and deliberation goes on inland, “hong, honk; angh, ongh, ah-ook-ook!”

The flurry is over. Half a dozen men are running about on the hard ground. A boat puts out from the reeds, making for two or three cripples that have settled on the water. There is a pile of glorious brown birds brought down to the sand beach. It has been brief, but busy. Some of these honkers are bigger than any a Dakota stubble shooter ever saw, vast fellows, whose great wings are knobbed and powerful; whose breasts are wide and deep; whose plumage is glossy as though new oiled, as indeed it has been for hours out there on the sand bar. Jim, the negro cook, waves a table cloth from the deck of the schooner, for he has seen from afar the havoc on the headland, and he knows what he can do in his little galley down under the schooner’s deck, with a Texas winter goose.

At night an hour before dusk, the scattered flight comes home again. The birds have fed, perhaps, perhaps have gone to water. Where they have been, or how far, it is impossible to tell. Some of the scattered bunches dodge the headland as they come

back, but many, as before, come across. Again the guns take their toll, till dark comes and it is over. The ice box of the schooner is full. All farther duck shooting is forbidden. It is all too easy here on a favorable day to kill more meat than can be used, and the Mede who is in command lays down the law regarding this inexorably.

“We’ve had our fun,” he says, “and we have got enough to keep the wolf from the door for quite a while. Let’s understand this game. It isn’t the dead weight in the ice box which is our main claim for glory. It is that we have given these old fellows a touch of respect for the human intellect. Now, I’ve got a scheme to still farther impress them. We’ll carry the war into Africa. Of course, I know that you can’t break geese up on their flyway, or on their roosting place, for they’ll simply cash in and quit the game. That’s not the way to work if you are shooting for the market; but we are not. We don’t want to see how many geese we can kill, but how many we can surprise. You wait till morning.”

So, since they are obliged to wait, they do so, and the man who talks bass unfolds his plan. It requires but slight machinery; nothing more than a sheet from off the bed, and a few sticks from the fuel box. With these the leader and two others are rowed out to the sand bar where the geese have been making their resting place in the middle of the day. This, by all the laws of fowling, it is at least half a crime to molest. but the idea here, as the leader explains, is fun and not a future bag.

He thrusts his little sticks down into the sand, one at each corner of the sheet, and stretches the latter tightly across, so that it makes a shallow tent, a foot or so above the ground. On the edge of the sheet he spreads out sand, and also scatters sand lightly across the top, so that at a little distance the cover would attract no attention, blending as it does so perfectly with the color of the earth about it. The front of this shallow tent is open, and before it, and about twenty yards away, two or three dead geese are propped up as decoys.

“I reckon those dead ones will get a goose lecture at long range, for coming in ahead of the procession,” says the captain of the scheme, “but we’ll let it go at that. Now then, get back in under there, and keep your legs still, and when you hear the flight com-

ing in, don't you dare move a muscle or bat an eye, or there'll be a vacant chair at your fireside. Wait till they alight, right there in the sand."

And so in time they take to this novel blind, and lie flat out on the damp sand, facing toward the decoys. And again in time they hear the far-away calling of the winged army coming in to rest. "We will burst up their afternoon conversazione this time, for sure," says the man who talks bass. "Wait till they stick their legs down to alight."

And in very faith, that is what the men in the flat blind do, and that is what the geese do. They are not looking for visitors, and they do not suspect the blind even, probably do not see it at all. They come on in, chattering and gabbling, and finally the eyes glaring out from under the sheet at the level of the sand actually do see the legs of the geese stretching down as they alight. Indeed, from the arrangement of the blind, the birds cannot be seen at all until they are practically at the level of the

ground. The eyes of the leader of this expedition into Africa turn upon his lieutenants who lie beside him. He chuckles and nearly breaks out into laughter as he sees the face of the boy next to him turn ashy pale with excitement.

"Now, jump!" he cries.

The frail covering is thrown off as the shooters spring to their knees or to their feet. A screaming babble of discordant surprise fills all the air. They are closer into the middle of a flock of live wild geese than ever they were before, closer even than when they were lying in the cowpaths.

Yet when they count up the dead birds they find not a hundred, not a score, not a dozen. There are only four dead geese for twice that many shots which have been fired. The boy wonders how it happened, but the man who talks bass is too full of delighted laughter to worry about the net results.

"Didn't we fool 'em?" he exclaims. "Oh, but didn't we just fool 'em that time!"

THE HUNTING LEOPARD OF INDIA

By Charles E. Clay

OF all the various species of the cat family of carnivora there is only one—and that at best a kind of hybrid—that has been trained and subjugated by man to become his faithful and powerful ally in the chase. I refer to the beautiful chita, cheetah, or hunting leopard of India.

This wonderfully strong and courageous animal; ranked by many noted sportsmen and naturalists, among them Sir Samuel Baker, Mr. Blanford and General McMaster, as, for a comparatively short distance, perhaps the swiftest mammal inhabiting the jungle; has a very wide habitat. It is found in many parts of Africa, Persia and India; but only by the natives of Hindostan is it caught and made subservient to the pleasure of man.

In this connection it is curious, as well as interesting, to note that while all aborigines of countries infested with large game, such as elephants, lions, tigers, leopards and bison, become expert hunters and trackers,

to the natives of India and the far east largely must be accorded the palm of capturing them with the ulterior motive of domesticating them in whole or in part for some useful purpose.

Thus while in Africa the elephant is hunted and slaughtered, wholesale, for his ivory, the same animal, from time immemorial, has been captured in India for the purpose of making him a beast of burden and draught; as well as for the more imposing pageants so dear to the oriental. So, too, tigers, leopards and cheetahs are taken alive and kept by many of the native princes as a recognized adjunct of the royal state.

The word chita, pronounced by natives, and generally spelled by Europeans, cheetah, simply means "spotted," and doubtless accounts for the older scientific classification of the hunting leopard as *Felis jubata* or "spotted cat." But as many other members of the felidæ, such as the lynx and true leopards, are also spotted, more

modern naturalists have renamed the real and only cheetah or hunting leopard, *Cynaelurus jubatus*. The natives of India often call the leopard or panther (*Felis pardus*), the "bearded pard" of Shakespeare, chitabagh or spotted tiger. Thus distinguishing it from the cheetah or hunting leopard.

The most salient characteristics of the hunting leopard, whereby it may be readily distinguished from the panther (*F. pardus*), are the slenderness of its body, the greater relative length of its limbs, which are longer than in any of the true cats—not

uted splotches of black, over almost the whole of the animal, excepting its buff colored chin and throat; these spots are solid (*maculata*), not ringed (*annulata*) with lighter colored centers, as panthers are marked, nor are they arranged in rosettes or in lines, but spread in a higgledy-piggledy fashion all over the skin. The ears are black outside and tawny on the margins and at the base. On the tail, which is relatively long, being equal to more than half the length of the head and body, the spots are confined to the upper sur-



"THE HAUNTS OF THE CHEETAH ARE THE LOW, ISOLATED, ROCKY, BROKEN GROUNDS BORDERING THE PLAINS."

even excepting the lynxes—the fact that its claws are only partially retractile and cannot be completely withdrawn into the sheath at the end of the toes, and the texture of the fur, which, in the adult, resembles much more the hair of a dog, albeit smooth and glossy, than the soft velvety covering of the cat.

The color of the cheetah varies from tawny to a bright rufous fawn tint, becoming considerably paler beneath the belly, chest and on the legs. On this body color, if I may be allowed the term, are distrib-

uted splotches of black, over almost the whole of the animal, excepting its buff colored chin and throat; these spots are solid (*maculata*), not ringed (*annulata*) with lighter colored centers, as panthers are marked, nor are they arranged in rosettes or in lines, but spread in a higgledy-piggledy fashion all over the skin.

Such is the general coloring of a full grown cheetah in his prime, when about five years old. I have, however, seen cheetah cubs, from two to six months of age, whose long hairy fur was as gray as that of a tabby cat; but when it was rubbed the wrong way the glint of the coming spots could plainly be made out.

At maturity the male cheetah stands about 30 to 33 inches high at the shoulder, though an animal I had and hunted with

for three years in the Deccan, which I bought as a cub, not three months old, from a couple of jungle wallahs in the forests of South Canara, measured 34 inches when full grown. His total length was 86 inches, of which 31 inches was tail.

Native shikarees and trainers, in whose charge the rajahs and sirdars place their cheetahs, say that these animals, when captured as cubs, cannot be taught to course antelope when full grown. I must take exception to so broad a statement; for, in two instances, at least, within my own experience, the contrary has been the case. The cheetah I have alluded to came into my possession a cub of two months and before he was a year old he had pulled down his first black buck, after a fair and square stern chase of over 200 yards; and during the following season won a prize of 200 rupees offered by the Sudder Taluqdar of Raichur, for the cheetah putting the greatest number of deer to his credit in twelve *chordaos* (let-go's), my cheetah scoring eight pull-downs out of the dozen loosings.

Mr. A. C. Hill, divisional engineer of the Madras Railway Company, also reared and trained a hunting leopard taken when a cub in the Coimbatore district. He used to carry the animal with him when inspecting the line; the cage on its traveling cart, being loaded on a flat construction car, and I have seen this cheetah show as fine sport after black buck as any animal captured and trained after it had reached maturity.

Cheetahs, as a rule, do not breed well in captivity; at least that is not the practice, because the jungle people will not trap the female, being, as she generally is, smaller than the male, and therefore less readily sold to the rajahs who naturally prefer the bigger and handsomer males for their kennels. Another reason, and probably the real one, is that greater labor and trouble is involved in training a cub to course deer, than to simply direct the movements of subjugated adults who have while wild fully acquired the art of stalking and seizing their prey. It is a generally accepted fact that hunting leopards in captivity merely use their natural instincts and never develop fresh mental powers, nor learn any new sagacity from their human trainers.

The haunts of the cheetah are the low,

isolated, rocky, broken grounds bordering the plains, chiefly cultivated in cotton or grain, which are the favorite grazing places of their principal prey, the antelope. The jungle wallahs who trap them say the cheetah usually hunt in pairs or families, having a recognized trysting place, generally a tree or rock. Here several members congregate and watch for their quarry. While looking for antelope they employ their leisure in sharpening their claws by scratching the bark of the tree or rock. The trappers search for these signs, and capture the leopards by spreading strong nets and rawhide nooses.

When caught the jungle folk lose no time in conveying their prize to the nearest rajah or sportsman, native or European, who will become a purchaser; the price of a wild cheetah being anything you can agree upon, from ten rupees up. The animal is then placed in a commodious cage three sides of which are iron bars, the top, bottom and one end (for the door) of strong wood. The cage is fitted upon a common village cart, or bandy, drawn by one or a pair of trotting bullocks. This becomes the cheetah's home and in it he is carried afield, when he has become sufficiently amenable to discipline to enter upon his career as a coursing or hunting leopard. The period for domestication is much shorter than would be supposed to be necessary for a creature so fierce and bloodthirsty in its savage state; but, during the process of handling, the cheetah is always kept gorged; the road to its affections, like that of many a higher animal, not altogether excepting man, being through its stomach. Kindness and constant companionship are also prime factors in its subjugation. When a cheetah submits to the caresses of its keeper as freely as any domestic pussy courts the fondling of its mistress, and allows itself to be hooded and unhooded without fighting or resentment, then it is considered ready to be tried as a hunter.

All hunting leopards are hooded with a stiff leather cap drawn over the eyes, similar to the caps worn by falcons when hawking. Some shikarees keep their charges hooded all the time, whether at home or afield, except when actually hunting, saying that it makes their eyesight keener, but I very much doubt this. The probable reason the cheetah is hooded

when going a hunting, is that he travels more quietly in his cage when blindfolded, and does not fret or frighten the bullocks drawing him to the hunting ground; for generally you hire village cattle for this purpose and the very smell of the cheetah in the cage behind them is apt to make bullocks restive, to say nothing of any angry snarling the animal may indulge in, excited and hungry as he is when about to be coursed.

Before a new accession to a kennel of trained cheetahs is to be tried after black buck, the keeper takes him hooded in his bullock cart, to an extensive maidan or empty level plain surrounding most Indian villages, where hundreds of hungry homeless, pariah dogs are always prowling. The keeper having singled out a likely looking dog, the cheetah is dropped from the cage and unhooded. The instant he sees his prey he gives chase, and such is the velocity of his furious charge that the short run appears like the repetition of the familiar hare and tortoise fable. For a sprint of anything under a quarter of a mile, where the going is firm and fairly level, the cheetah will overhaul the swiftest greyhound, or the fleetest racehorse that ever looked through a bridle. He does not bound upon his prey like a lion or a tiger, but fairly runs it down as a dog does, gripping the throat as he goes at full speed, and once the quarry is brought to earth there he holds it pinned until his keeper hoods him, always rewarding him the while with plenty of blood and the warm viscera of the game he has captured. After one or two preliminary breathers of this kind the cheetah is ready to be loosed at its legitimate quarry, the fleet black buck.

This species of coursing is of the most intensely exciting and exhilarating character. The contestants, if that term be appropriate, are pitted on a fairly equal footing. On the one hand the fleetest of living quadrupeds, free, wild and on his native heath, with all his wits about him, keen of sight and of scent; on the other, a creature as wild as its prey, noble, beautiful and strong, the acme of symmetry and grace, ready to match instinct with instinct, strength against strength, speed against speed. Man is scarce an accessory in the fine duel to be fought; a spectator only and eager to award the palm to the one whose natural powers gain the victory.

How eagerly I have scanned the dewy green and how often felt the thrill of joy that makes the blood course faster in the veins as the glasses fell upon a distant herd cropping the tender shoots that lay beneath the shrub. Then come the wary and cautious approach towards the game until the lordly buck describes our slow advance; the sudden halt, the stealthy stalk of the cunning cheetah; the terrific rush as soon as instinct tells him he is within striking distance; the wild, mad gallop as you strain every nerve to get a view of the capture that you feel must follow; the loud hurrah that makes the welkin ring as the bounding form of mottled gold ranges alongside of the panting buck, and the next moment both pursuer and pursued roll over in a cloud of dust and the chase is at an end.

If that be not a realization of a hunter's brightest dreams, then match me another as fair.

But the cheetah, swift and sure though is his general rush, not infrequently fails to overtake the flying prey; then the conditions are not so rosy, nor the sport so entirely devoid of danger to the keeper and spectators as might be inferred. For be it remembered, the cheetah is asked to do his hunting on an empty stomach, and, in order that he may be at his best, he has usually been kept fasting for forty-eight hours. When, therefore, he finds he has missed his expected refreshment, he flies into a furious passion and is ready to seize upon and rend the first thing that comes his way. When in one of these ungovernable rages not even his keeper, of whom at other times he is exceedingly fond, would stand the chance of going scot free did he not provide himself with a tempting morsel with which to make his peace ere he attempted to hood his disappointed favorite and place him again in his cage.

Cheetahs that have failed in their first effort may be loosed again during the same morning at a fresh buck subsequently sighted; but let a cheetah make his first course successfully and be blooded fully as a reward for his prowess, then nothing will coax or tempt him to run again; those therefore lucky enough to have a large kennel of hunting leopards generally take out five or six, and with this number, if game be plentiful, a magnificent morning's sport may be had.



THE JUMPING RACE AT HOLMENKOLLEN.

NORWAY'S NATIONAL SPORT.



THE ROYAL NORWEGIAN GUARD AT SKI DRILL.

NORWAY'S NATIONAL SPORT

By T. W. Schreiner

(Photographs taken especially for OUTING by Th. Thorkelson, Christiana.)

NO nation in Europe except Norway has a national sport which is capable of attracting hosts of visitors from other countries; and especially inviting must it be when it is borne in mind that it takes place in the midst of a rigorous winter, and that the visitors can very seldom at first be other than onlookers. Ski running differs in that respect from its nearest parallel, the national sport of Hol-

land, skating, because the visitors who go to Holland mainly go because they can enjoy the sport from the first, as much as if they were natives to the manner born.

Yet in spite of the drawback I have mentioned, more and more foreigners, and from farther distances, are every year drawn into the fascination of Norway's national sport and they enjoy it as much as do the natives. They travel hundreds of miles to



SKI CLUB HUTS AT FROGNERSETEREN.
CHRISTIANIA IN THE DISTANCE.



ON THE VERGE OF THE "HOP."
JUST ABOUT TO JUMP.

witness the annual ski races and leave with souls as filled with enthusiasm for it as are their kodaks with "snaps."

So enthusiastic have these visitors become that on their return home they planted the sport in parts of Germany and Austria, where it has taken root and grown so favorably that championships are held every year. Up to the present Norwegians have naturally won but they may soon find hard competitors in foreign countries.

Nowadays the running and jumping on skis is indulged in very largely as a healthy sport; but for the old Norseman his pair of ski was a necessity, and it is so to-day for the out of the way farmers, as a means of communication in the winter, when many feet of snow cover the woods, mountains and valleys.

The ski differs from the Canadian or Indian snow-shoe. It is usually as long as the wearer can reach upwards with his arm. Its width is from 3 to 5 inches. The front (toe) is pointed and bent upwards, so as to prevent it from cutting down in the snow. Ash is considered the best material, and the most used. Pine and oak are also usable, but do not slide so quickly as ash. It is most important in ski running to have the feet firmly fixed to the middle of each ski. This helps what is called the "binding." The foot must not be allowed to slide sideways or backwards. But as in every sliding movement forward the foot must nec-

essarily come "on toe," the binding must not prevent that movement. These bindings are, and have been, subject to many improvements and patents, still even now very few are good. Beyond the ski there is required to complete the outfit the long stick and the peculiar "laupar shoes" made out of thick, soft leather, pointed and bent upwards at the toe, so as to fit in the binding. The low heel has a strap fixed to it, to keep the binding in position. All women and most men and boys, have their special ski suit. Women like to make theirs very picturesque. The material used is dark blue or grey "home spun," and the pattern a short skirt, red or yellow cap, belt and other ornaments.

The accompanying photographs show the spirit and local atmosphere of the sport but do not show the colors. It is indeed a most beautiful sight to see the reds, blues and yellows of the original dresses against the pure white snow.

As common as the baseball bat is in the United States so is the ski in Norway. Children have hardly learned to walk before they start on skis, and on a clear frosty Sun-



IN MID-AIR—AFTER THE TAKE OFF.

day it is an interesting and inspiring sight to see the thousands that turn out from the city, striding over fields and hills up to the woods, where the clear air and the magnificence of nature brings life and spirit to the dullest boy, or weariest man or woman. There may be seen old grey-headed fathers with sons and daughters, and companies of healthy, rosy-cheeked boys, in the best of spirits with the family provisions on their backs hurrying to reach their destination, which is nothing more than a small simple hut, way up in the woods, or a hill, where they can compete in jumping.

The surroundings of Christiania are specially adapted for these interesting outings. High ridges are all around it which lend themselves to the sport, as well as make the location of the city one of the most beautiful in Europe. On the top of one of these ridges the well-known resorts and sanatoriums Holmenkollen and Frognersætren are located. The latter is about 1200 feet



JUMPING IN COUPLES.

above the sea, and something like six English miles from the city. It is in winter the "Coney Island" of Christiania. An electric trolley, the only one of the kind in Scandinavia, will carry you up to it through the most beautiful and wild landscape of woods and mountains. You need not trouble the trolley on your return—your skis will provide for that.

The real sportsmen among the ski runners are, as a rule, organized into clubs as numerous as the football teams in the United States; Boys, business men, students and professional men, all belong to a club which either rents or builds its own timber ski hut some eight or ten miles from the city, up in the woodland, usually near a steep hill where jumping can be practiced and annual club races held. Of course the trip to the club's suburban hut takes several hours running up and down over the magnificent ridges and the intervening valleys. Every Saturday afternoon in the winter months the members of the various clubs start for their simple, but comfortable hut, which at that season they would not change for a millionaire's mansion. Late that evening or early on Sunday morning they reach their destination. What a collection of genuine, healthy, good-spirited sportsmen these club members are! How could they be otherwise, enjoying the most healthy, inspiring and amusing sport to be found anywhere? And then the magnificent, majestic winter nature of old Norway!

I should like to take a real American sportsman on a lively ski tour in a clear frosty, moonlight evening. I should like him to pass one night among the boys in a ski hut! When the dozen fellows had



A SUCCESSFUL LANDING FROM THE "HOP."

made up the fire at "peisen," put their coats up to dry, and were busy preparing coffee in the big copper kettle, joking, telling stories, singing to the tunes of a musical box, or enjoying an honest game of cards. One could not find more genuine enjoyment however much money was paid for it! They leave sleep alone that night and make

order" by cutting out trees from the forest. About one third way from the top, where the flag is seen, the "hop"* is built up. This is an elevation between one and two yards high, covered with snow. The first third of the hill before the "hop" furnishes the sliding speed and gives the impetus, and when the "hop" is reached, the jumper straight-



A NORWEGIAN SLEIGH.

good use of the time till Sunday night, when they start for the city again.

Every February the "Norwegian Derby" takes place, and on the two days during which competition among the one or two hundred of the best ski runners and jumpers is going on, the newspapers discuss nothing else. The day is made a local holiday and thousands turn out from Christiania to witness the Holmenkollen races. Foreigners, especially Englishmen, are in great numbers on the grand stands along the hill.

This hill is very steep, and "made to

ens up, and sails through the air, touching the hill again may be twenty to thirty yards from the elevated "hop." Now comes the exciting moment. Will he continue down the rest of the hill standing? or will he fall out of sight for some seconds in a snow cloud? Many fall and make some terrible summersaults in the snow, during which they very often break one or both skis. Many manage to keep their balance and finish the hill standing. Some jump longer than others, and if such an one's position in the air is correct and he does not fall, he

*"Hop"—Norwegian word for "jump."



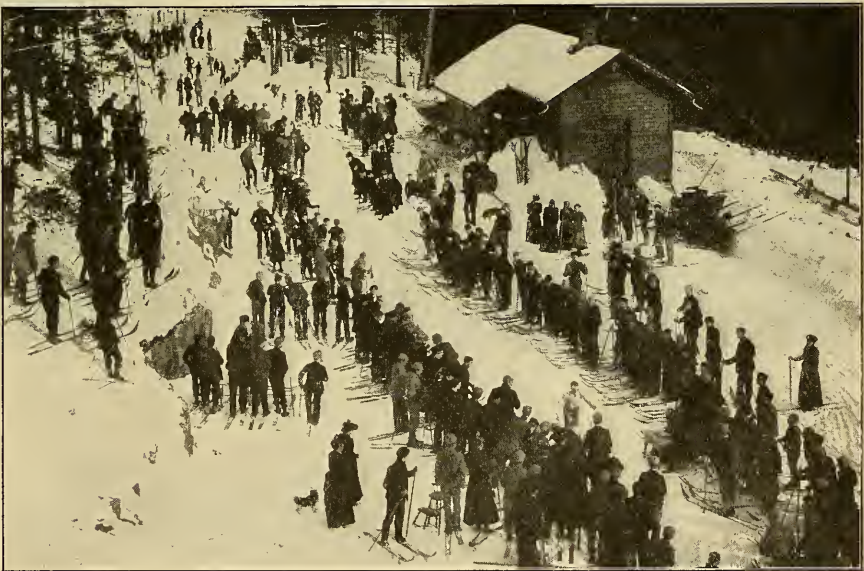
A BOY'S SKI CONTEST.

has a good chance of capturing one of the first prizes. Each one, however, has to stand down twice. The greatest honor obtainable in these competitions is the King's Cup.

The second day of the Holmenkollen races is devoted to long distance running.

The route is generally up to about twenty miles long, through the most difficult territory up and down over a wild route. One person, with a number on the breast, starts every two minutes. It is a round trip, and it is very exciting to watch the finish.

Skis now form part of the outfit for some



THE FINISH OF THE LONG DISTANCE RACE AT HOLMENKOLLEN.



LONG DISTANCE RACE AT HOLMENKOLLEN.
THE START—NEXT MAN READY!

of the Norwegian military companies and in case of war in the winter the possession of drilled ski-soldiers would undoubtedly prove very valuable.

Norway in summer is visited by thousands of tourists, among them numerous Americans. But Norway in winter dress is the more interesting.

THE SPORTSMAN'S VIEW-POINT

By Caspar Whitney

**International
Rifle
Matches
at
Sea Girt.**

It is good to hear that there is to be a renewal of international rifle shooting. Perhaps the cable revolver match, which an American won from a French team last year, is somewhat responsible for the present activity of the National Rifle Association; perhaps the warlike spirit of the century is answerable. At all events we rejoice in the results. Anything that will create an interest in modern small arms and their use, is to be welcomed, for the Spanish and the Boer wars have shown, in manner most emphatic, the immeasurable value of marksmanship. Therefore, as an ounce of prevention is worth a pound of cure, let us by all means encourage and develop the American's natural aptitude with the rifle.

Invitations to enter a team at Sea Girt—the excellent range of the New Jersey National Guard—have been sent by the National Rifle Association to practically the whole civilized world. In England, Scotland, Ireland, Canada, Australia, France, Italy, Norway and the Argentine Republic, rifle shooting is conducted by organized bodies of marksmen; in Germany, Austria, Hungary, Switzerland, Denmark, Japan, Holland, Mexico and Brazil, there is no organized shooting outside of the army. The prizes will include the famous Palma trophy, representing the world's championship at 800, 900, and 1,000 yards, for teams of eight; and the Hilton trophy, valued at \$3,000, for teams of twelve, at 200, 500 and 600 yards. If only half of these eighteen countries are represented at Sea Girt next September, the match will be the most interesting on record; and certainly the most instructive, since one of the conditions provides that "all teams must shoot with the national military arm of the country which they represent, without any alteration of any kind." So also must the "ammunition be standard, in original packages, as issued

by the Government for troops in the field."

**Americans
Unrivalled
Marksmen.** If the Americans should this year equal the average performance of native teams throughout the eighteen years of international meetings, both the Palma and Hilton trophies will remain on this side of the Atlantic. In point of fact, however, the Americans, English, Scotch, Irish and Canadians should all show higher percentages than hitherto; there has been improvement in rifles and abundant practice since the last match in 1882.

The first international match under the National Association rules was held at Creedmoor in 1874, between American and Irish teams, and won by the former—934 to 931, out of a possible 1,080. The year following, an American again defeated an Irish team at Dollymount—968 to 929. In 1876 at Creedmoor, an American eight scored 3,126 out of a possible 3,600, beating teams from Ireland, Scotland, Australia and Canada; the Irish team was second, with 3,104. Two weeks later, in the same year and on the same range, the American beat the Irish team 1,292 to 1,154. In '77, an American team defeated one from Great Britain, and there were no matches either in '78 or '79. In '80, however, an American team scored 1,292 to the Irishman's 1,280 at Dollymount. There was no other match until '82 and this, the last, proved also to be the only defeat sustained by an American team on the international record. It was a military match between teams representing the National Guard of America and the Volunteers of Great Britain; the Americans were defeated, 1,805 to 1,975, out of a possible 2,520.

The last match was a sharp and unfavorable commentary upon the marksmanship of our militia—but for the rest the record is one to which we may point with pride.

Let us hope that the result of the 1901 meeting will make amends for that of 1882.

Substantial I have been asked if it is not true
Bicycle that fewer people ride the bi-
Popularity. cycle now than formerly—say, two or three years ago, and I am so surprised at the question as not to be quite sure whether or no it is intended to be taken seriously. Yet there is, I know, an impression in the minds of some people, who gauge the world by their immediate, perhaps low, horizon, that there is less bicycling now than at any time within six years. But facts to the contrary, are so patent and so plentiful that to merely walk through the world with eyes open, would be convincing. In the first place, there are as many bicycles being manufactured to-day as two years ago—that's a simple answer to the question of decreasing interest; in the second, the bicycle now reaches sections and is used for purposes unknown to it two years ago.

One does not see so many riders on the city streets and in the parks, because the day of the bicycle as a fad has passed. It is no longer a mere incident to a social or a racing meet; it has become a part of our industrial and health making economy. It is ridden to-day by one hundred where formerly it was by one, for mere pleasure and recreation. Nothing will affect its continued popularity in this direction; certainly not the automobile. Its reduction in cost and the liberal terms on which it is sold, has put it within the means of practically every one, and judging from observation, few there are who do not take advantage of the opportunity to own a durable, uncomplaining and swift moving mount. It is worth a trip into the country if only to see how the cheapened bicycle has gladdened the lives of the farm boy, the laborer, the mechanic whom more often than not, one now sees speeding to school and to work on a safety, whereas formerly they rode shank's mare.

The bicycle has the great advantage of being useful, as well as sport and health-giving—and its vogue will never cease.

Mechanical The New York show reflected to
Perfection a marked degree the prevailing
in the 1901 sentiment among modern riders
Model. to regard the bicycle as a vehicle of recreation and of utility, rather than as merely a racing machine or a freak. The 1901 model represents a degree of mechanical efficiency never

before attained. It is a neater appearing wheel and lighter in weight than the bicycles of 1899 and 1900; the average chainless of this year weighs about 25 pounds, which is several pounds lighter than the older models. This difference has been brought about largely by a reduction in the size of the tubing. The big tubing of recent years has been very generally replaced by tubing of $1\frac{1}{2}$ inch, or even 1 inch, which is made equally as stout as that of larger diameter, through improved manufacture giving greater tensile strength. The agreement of manufacturers upon so many essential features points conclusively to a standard in bicycle construction which stands very near to perfection. It seems generally conceded that the highest type comprises bevel gear, cushion frame, coaster brake, and adjustable handle bars, and I observe that the center drive gear—*i. e.*, the main driving gear at the center of the crank shaft—has been adopted by others than the Spalding—which was not only the first make of chainless ever exhibited, but the one that introduced the bevel gear. Personally, I prefer this gear. There was a noticeable improvement, too, in the coloring of the bicycles at the show; plain and tasteful enameling being the rule. Indeed the 1901 bicycle is a thing of beauty, and quite the strongest and best machine to have yet been put on the market. It has been built with the needs and comfort of the average wheelman and woman in mind, and I do not see how it can be improved.

Bicycle Meantime, the value of the bi-
Aid to cycle as an instrument of war is
Cavalry being recognized over the progressive world. Some very extensive and instructive experiments have been made with detachments of cyclists acting independently and in conjunction with cavalry; and in the matter of experimenting the larger Continental powers have quite taken the lead. The United States is particularly backward—due, no doubt, to the lack of much-needed and regular manœuvres and a governmental drilling grounds suitable to the assembling of a corps.

In Continental experiments it has been conclusively shown that in conjunction with cavalry, bicycle detachments can be very valuable in reconnaissance; and success has also attended the use of cyclists acting without the support of other arms. Yet the

matter has by no means gone so far as the organization and training of cyclists as independent troops. Thus far they have co-operated with cavalry, and the trend seems to be in the direction of combining them with that arm of the service. This is all in reconnoissance—of course; as fighting troops on the field of battle, the possibilities of detachments of cyclists remains to be determined; it seems limited—yet there are not wanting those who profess confidence in their worth.

**New
Motor
Bicycle
Model
Wanted.** It is a question whether the desired, and in some cases, deserved success, will come permanently to the motor bicycle and to some of the others with three and four wheels, until a model more adapted to the new motive power be evolved. At the present time, for the motor bicycle, the diamond frame and general construction plan of the man-propelled machine is being utilized for a machine developing horse power. In a word, old ideas of construction are being borrowed for a vehicle which is not only entirely new—but distinctive. As a result, the weight in the new machine is placed too high, and the vibration is more trying to the rider than there is need for.

The mechanical deficiencies of the three and four wheel motor cycles are not so disturbing, nor are they nearly so great. Yet there is much to be done before all these vehicles yield comfort with speed; and first of all, a new type of vehicle is needed. So also with the automobile; the present horseless carriage period needs sorely a designer who will break away from the accepted carriage types, and produce one better adapted to being driven by steam, gasoline, or electricity, twenty, thirty or even forty miles the hour. Motor power vehicles are passing the experimental stage, and it must be acknowledged that manufacturers are making the most of present enlightenment.

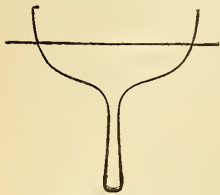
**Strange
Stories
About
Shamrock II.** Those are remarkable tales concerning designer Watson's discoveries and *Shamrock II.*'s lines, that are finding their way to this side of the Atlantic. We expect, of course, a certain amount of extraordinary tale-making in an *America's Cup* year, and give due allowance for it, but this yarn is

quite a wonder in its way, and must have made the New York daily newspaper editors envious. Watson, so it seems, according to report, has, through his tank tests, discovered that the greatest width of beam of present sailing yachts is in the wrong place! This is startling enough, to be sure, but mild as compared with the report that, because of this discovery, the greatest beam of *Shamrock II.* will be "considerably forward of the mast!" which means that the lines of the challenger will be somewhat after those of the middle nineteenth century boats, when the width was near the bow and tapered off to the stern. These were the days when the form of the short-bodied fish whose bulkier end is almost always forward, was accepted as a model; since then, designers have learned that the slim-bodied fish, with no bulky forward end, is the fastest swimmer of the sea. To be sure, a log still tows easiest butt end first; but I trust there is no significance in that reflection which may apply to the challenger.

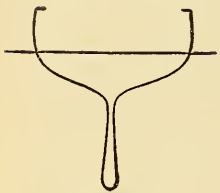
Of course these "discoveries" and stories are the result of reportorial news itching—and are instructive in showing to what extent the modern newspaper may be relied upon to supply trustworthy information. Mr. Watson is, we fear, making the task of successfully defending the *America's Cup* much more difficult for us than is implied by these reported "discoveries."

**Lawson's
Boat
Powerful.** If the dimensions recently given out of the Boston Cup defender are trustworthy, we may surely count on seeing some very good racing in the preliminaries—if the breezes are strong—no matter how good the New York defender, building by Herreshoff, proves to be. For the lines of Mr. Lawson's boat suggest something of the "brute" type, and indicate great sail carrying ability. According to the figures given out, the Boston boat will be 140 ft. 6 in. length over all; water line length, 90 ft.; extreme beam, 24 ft.; forward overhang, 26 ft.; after overhang, 24 ft. 6 in.; draught, 20 ft. There is no doubt that designer Crowninshield has drawn the lines of the Lawson Cup defender with the idea of making a more powerful boat than *Columbia*; and in the matter of stability there is equal certainty of his having succeeded. He has made a distinct departure in the forward frames, which instead of being round and easy, as

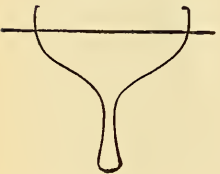
in *Columbia*, are hard and flat. This means that when the Boston boat is heeled over she will sail on a longer floor than has ever a ninety-foot sloop. Certainly, too, will she be able to spread a larger sail plan. It is said that at least 2,000 more feet than *Columbia* carried is proposed for the Lawson craft. The entrance of the



SHAMROCK I.



LAWSON.



COLUMBIA.

boat is blunt, and the after-deck lines do not trim in neatly, as we have seen in *Defender*, *Columbia*, and last year's seventy footers. Crowninshield has not aimed for the fine entrance and clean run as she lies down—but for sail-carrying power and stability. Unquestionably he has secured both. But there is one very important direction in which Mr. Crowninshield has not succeeded in surpassing Mr. Herreshoff's mark on *Columbia*—viz., displacement. *Columbia's* was 145 and Lawson's will be 145.65. It is well known that the continual and greatest care of designers has been to cut down displacement; and Herreshoff may be depended upon to improve on *Columbia*, in this respect as well as in sail-carrying capacity. What little can be learned of the New York cup defender indicates great power, without sacrificing those exquisitely refined lines of entrance and exit, for which the Herreshoff models have become famous. On present knowledge, therefore, it looks as though Crowninshield had yielded too much to the desire for great sail-carrying ability. And the New York defender syndicate is sure to derive some solace, from studying the comparative lines that were published the other day in the *Tribune* and are reproduced herewith, of *Columbia*, *Shamrock I.* and the Lawson model. The resemblance between the bilge curves of *Shamrock* and the Boston boat, is notable—and, I should say, not reassuring for the latter's chances. Yet it

is a type which has not been thoroughly tested in the large classes, and in the smaller ones it has met with distinguished success.

Sir Thomas Lipton's Request.

It is to be hoped that the New York Yacht Club will accede to Sir Thomas Lipton's request for a one-gun start in the *America's* Cup races. Not only that the reasonable desires of so sportsmanly a challenger may be granted, but because in suggesting the flying start, Sir Thomas merely asks for what is customary throughout the yacht racing world. The New York Yacht Club is to-day, I believe, the only important yacht racing organization that clings to the timed start—i. e., one which gives yachts the privilege of crossing the starting line at any instant within a certain time limit, announced by a first or starting gun, and closed by a second or handicap gun. Between these two guns yachts may cross under New York Yacht Club rules, and their time be taken from the actual crossing; in the one-gun start time is taken from gun fire.

A race started by the two-gun start is always most confusing to the on-lookers; indeed, not infrequently is it robbed of interest, because of the impossibility of ascertaining the relative positions of the competing yachts throughout the course. As a rule, in a close race, under such conditions, few off the Committee boat know the leading yacht. Yet it is of course true that the *America's* Cup races are not sailed for the mere sake of providing an exciting spectacle; and so the on-lookers' objections may be waived. The serious objection of American yachtsmen to the two-gun start, is its negative influence on smart seamanship. There is no doubt that the flying or one-gun start puts a premium on the smart handling of a yacht, and as that is one of the most important elements in racing, American sportsmen look with favor upon no rules which tend to lower rather than to raise native skill. For this very good reason, if for none other, should the New York Yacht Club grant Sir Thomas Lipton's request.

In point of fact, American skippers are very clever on the flying start, which prevails in Eastern waters, on the Great Lakes, and in most of the racing around New York. It would be strange to conduct the premier yacht race of the world, on lines other than those indorsed by modern custom.

**Launch
Owners,
Attention.**

A bill has been introduced into Congress by Representative Grosvenor, which, if passed, will not only injuriously affect manufacturers' interests, but put obstacles in the way of launch owners. This bill is "an act providing for certain requirements for vessels propelled by gas, fluid, naphtha or electric motors," and is to amend an act approved in 1897, which recited that "vessels above fifteen tons burden," propelled by these motors, should carry a licensed pilot and engineer, and be subject to government inspection. Mr. Grosvenor's bill proposes to cut out the class limitation, so that should it become a law, the smallest naphtha launch used for hire would be obliged to carry a licensed pilot and engineer. The law as it stands is excellent, for it provides desired protection to the traveling public; but to amend it so as to make pilot and engineer necessary to every little launch, is to deprive thousands of worthy men on the lakes and rivers throughout the country of their present means of livelihood; not to mention destroying the pleasure and sport of a considerable percentage of our people on their summer holidays.

This belongs to that class of absurd bills, which every now and again are put forth by hysterical persons, who have read of, or heard of an explosion somewhere or other. In point of fact one hears so seldom of a launch blowing up as to make it a nine day's wonder. Should this bill become a law, no doubt its projectors will be proposing another to affect yachtsmen who carry launches for private use. Legislative epidemics of this character are best cured at the beginning.

I have often wondered if, in our concern that the crack player **Give the Golf Duffer** has everything to his liking, we **a Chance.** are not quite overlooking the duffer who may not shine on the greens, but whose support is very necessary to their up-keep. It seems to me there are too many club tournaments. Saturday is the one day which a great many, perhaps the majority of men can devote to their golf; is it not therefore, a mistake to hold regular Saturday tournaments, or is there not some way to be devised by which the duffer may pursue his untutored and fozzling way?

There is really no reason why the duffer's

inability to negotiate the links under a hundred should be so heavily penalized. He is doing his best, and paying his dues, and no doubt he is very necessary to the life of the club. It seems to me it is well to encourage him to persevere if the club is to prosper, especially considering that he greatly outnumbered the cracks.

Caddies, I note, have been declared luxuries" by an English judge in the course of legal proceedings over Sunday playing! Cannot some of the brand be imported?

The election of Mr. R. H. Robertson, of the St. Andrew's Club, to the presidency of the National Golf Association, as the successor of Mr. W. B. Thomas, who declined to serve a third term, gives general satisfaction.

Intercollegiate golf in the West is new, but the proposed meeting between the teams of Wisconsin and Chicago Universities, is so commendable an innovation that it should be followed by others.

I trust Eastern golfers, assembled at the annual meeting of the National Association, will have the good judgment, if not the sportsmanship, to heed the reasons given by Western golfers for objecting to the amateur championship being held so early as June. There is truth and sound sense in what the Westerners say. Eastern golfers have the considerable natural advantage, in preparing for an early tournament season, of being able to get on the links for regular practice, from a month to six weeks earlier than is possible in the middle West. That this is a fact which should have the sympathetic consideration of a sportsmanly Executive Committee, seems hardly necessary to point out. Unquestionably, the National event should be scheduled so as to give Western golfers enough practice to justify their entry. It hardly seems likely that the Executive Committee will be so obdurate, not to say improvident, as to prefer an early championship date, to the co-operation of Western golfers.

It would be unfortunate in the extreme were the present harmonious relations in golf between East and West to be disturbed; for there is no denying that the game's national and prosperous development depends on a union of interests. Many Eastern men do not think this true, and some, no doubt, will

jeer at the thought; but the fact remains quite unchanged, as time will prove. There is too much ignorance of the West among Easterners; and I suspect, also, that too many of the Eastern golf legislators view the U. S. G. A. championships as a function to be fitted in with their other summer habits and engagements, rather than the national sporting event that it is.

Now as a matter of actual fact, of all months on the sporting calendar, June is perhaps the most unpropitious that could be chosen for the golf championship, because it is already filled to overflowing with sporting events of long standing and great interest. It is a month devoted to the universities—to their commencements, their baseball and their boat racing; it is, besides, the anglers' choice period in which to practice the gentle art; as if the month was not full enough already, there is the horse racing and the best period of polo. July, and especially August, are devoted to yachting, canoeing and cruising generally; July might be available, but September would be the ideal month. It seems a mistake not to give games distinctive and distinguishing seasons.

**Playing
Golf
For Free
Board.**

Perhaps the most important subject which should come up for thorough discussion at the National Golf Association's annual meeting concerns amateur golfers who accept free board and transportation from resort hotels in return for their attendance at the local tournament. This is the same evil which, after much hard fighting, was rooted out of all university baseball save at Yale, where the arms of President Hadley and his faculty have remained open to this semi-professional. Aside from Yale, however, all Eastern colleges with respect for the cleanliness of their sport, have forbidden their teams to this class of "amateur," and at Yale there is just now a strong movement to also cast out this type of athlete.

Last year Mr. W. B. Thomas, on his reelection to the Association presidency, sounded a warning against the hotel player, and suggested the need of stricter legislation on the subject. Individual example and club influence have done a great deal toward keeping golf free of the player who travels on "receipted bills," yet he does thrive to an extent, and is tolerated, whereas he should be published and expelled from amateur clubs and tournaments.

One of the first steps in this direction, it seems to me, would be to forbid golfers entering any tournament given without the sanction of the U. S. G. A., or one of its legislative divisions; and the second step, to withhold such permission from hotels. This will have no restrictive influence whatever on the play of holiday-making golfers; nor will it offend or harmfully affect hotels which maintain a course legitimately for the pleasure of their guests. At all events, the first consideration of the Association should be, and is, I am sure, the health of the game. But the Association can reassure our confidence in its good intentions, by ruling definitely upon the man who plays golf for board and lodging.

It is a pity we have no association in America to organize and encourage national figure and speed skating, and to hold genuine national championships.

There is, to be sure, a New York Athletic Club skating coterie which calls itself the National Amateur Skating Association of America; but the name is merely a bit of pleasantry on the part of these skating members of the New York Athletic Club, who, so far as their actual influence on the national sport is concerned, might, with equally merry irrelevancy, style themselves the National Skating Bund of All the Russias. Yet we have no organization more national in nature, and that is why America, of all the countries where skating obtains, is the only one in which the sport lacks a real national character. For a number of years a figure competition has been held annually in a New York rink, and a speed contest on New York waters, with New York judges, and New York entries—save for an occasional outside aspirant—and the National championship solemnly awarded to the winners thereof. This year the speed contests—the so-called championship events of the United States—were held on a rink at Montreal! By the same token why not a roller skating championship at Guam?

Probably nothing in the way of real national organization will be done, because initiative force seems lacking among skaters, but both figure and speed skating ought to be taken hold of by the Amateur Athletic Union. If this could be brought about, there should be annual sectional championships followed by a national event, held alternately at different points. To contin-

uously hold the events in New York is both absurd and unfair, since in New England alone there is more skating activity in one day than could be seen around New York in a month; and Boston holds at least three figure skaters, Messrs. Bacon, Evans, and Vinson, who could score more points in a fairly judged competition than any three amateurs New York can produce.

The only way to develop a national character in our skating is to encourage local endeavor by establishing sectional championships; and by organizing a national body which shall have an executive board, drawn from different sections of the country, and actuated by genuine interest in the sport rather than by self or club exploitation. I marvel at the supineness of our skaters.

Figure Skating Competition.

There is no doubt of Dr. A. G. Keane, N. Y. A. C., being the most skilled of New York figure skaters; he has demonstrated his superiority in four consecutive annual competitions, this year certainly with added emphasis. Nor is there any doubt of his being one of, perhaps the most accurate performer in this country. Except for his physical strength, Dr. Keane is not naturally qualified to attain distinction in figure skating;

yet persistent practice has given him such balance and control that he is able to go through a long programme with astonishing precision. But his is not the sort of figure skating which is pleasing; for though its strength and technique command admiration, it is utterly without ease or grace, and, therefore, unentertaining. Figure skating without grace is like violin playing without soul; precise technique may satisfy the judges, but it is not sufficient for the beholders.

This is not to challenge Dr. Keane's right to the association medal he won last month

at the St. Nicholas rink; certainly he completely distanced his four competitors in technique; it is only to utter the regret that the New York champion should have so much of precision and so little of grace. Personally, I would rather the comparatively faulty technique and the grace of Mr. Irving Brokaw, than the graceless technique of Dr. Keane, who defeated him for first honors.

The Association programme—used on this occasion—is very much in need of a thorough overhauling; when it takes from two o'clock in the afternoon to midnight to decide on the best of five competitors, it is time something was done to relieve suffering sportsmen.

Apropos of the Association, I was not a little amused, in looking over its recently published year book, to note marked against the year 1893—"no contest; lack of ice," for to my certain knowledge, Bacon and Evans of Boston hold the gold and silver medals sent to them by the Association for winning first and second in the figure championship of that year.

Hockey Losing Character.

The average hockey game in New York reveals so much of "muck-erish" tendency in its quite unnecessarily rough play, that I am quite of a mind to rejoice rather than regret, at the decreasing number of sportsmen and their friends who attend the exhibitions. Yet it is a pity, for the game is one of the very best, and susceptible of very skilful manœuvering, when, as was the case in the Yale-Pennsylvania (15-0) and the Harvard-Yale (4-0) matches, the hoodlum is not on skates, and clean sportsmanly play obtains. I observe, too, a growing tendency to pervert the game from its original scheme of a contest solely in skilful manipulation of the puck to one in which physical contact and strength is an all-important element—indeed the winning element, as the Brown-Yale (1-0) match demonstrated. Although Yale had the greater skill in the finesse of the game, the employment of Brown's superior physical strength, in continuous and severe body blocking and checking quite overwhelmed them. Armed with a sabre one might beat down the guard of the foil—but that would not be fencing; nor is scoring with the puck through the introduction of football tactics—hockey.

The game, as played in New York and vicinity, is undergoing change, and one not to be desired. It seems to me very necessary



DR. A. G. KEANE.

for the health and future of the sport that the colleges take the legislation entirely out of the hands of the Hockey League, which is either unable to or undesirous of stemming the hoodlumish tide. Good and energetic legislation is the more urgent, lest the school teams also be swept along with this tide.

The second meeting between Canadian and New York players has emphasized the superiority of the former; in two recent matches, a Montreal team easily defeated first the New York Athletic Club (6-1), and then an all New York team (5-0), which represented the full strength of Greater New York.

Although the colors under which he raced while Prince of Wales, **King Edward's Race Horses.** will not be seen on the track this season, yet there is small likelihood that Edward VII. will allow the English turf to suffer, as undoubtedly it would, by the retirement of his stable of great race horses. Next to being a worldly-wise and tactful man, the King, above all else, is a sportsman; not by way of affectation, but by nature and impulse; and he may be depended upon to do nothing that will even temporarily harm any game, least of all racing to which he is devoted. There is scarcely a doubt that his stable will fulfill its engagements under another's colors; perhaps those of his trainer. Already it is reported that the Duke of Devonshire will lease the stable and run the fourteen horses in his colors; at all events, the horses are practically certain to run.

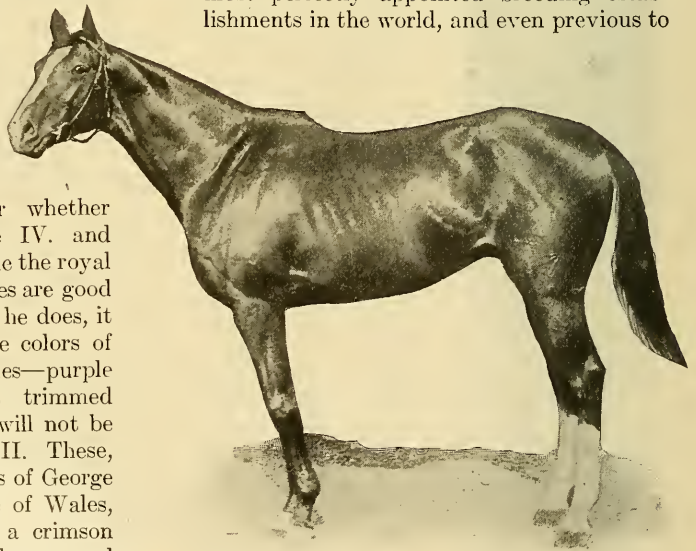
There is much speculation just now as to whether the King will personally withdraw from racing or whether like Queen Anne, George IV. and William IV., he will continue the royal stud in training. The chances are good that he will. Yet even if he does, it is well nigh certain that the colors of the erstwhile Prince of Wales—purple waistcoat, scarlet sleeves trimmed with gold, and black cap—will not be adopted by King Edward VII. These, by the way, were the colors of George IV. when he was Prince of Wales, and were abandoned for a crimson body, gold lace, purple sleeves and black cap, on his succeeding to the throne.

Hamburg Cheaply Bought.

Sixty thousand dollars is, I believe, a record price to pay for an American thoroughbred untried in the stud, yet in buying the six-year-old Hamburg at that figure, the Hon. Wm. C. Whitney may be said to have secured a bargain in horseflesh. Certainly he has added to his La Belle Stud in Kentucky, the most famous direct descendant of the greatest producing and racing American families. For in the veins of Hamburg flows the blood of three champions—Hanover, Hindoo and Hamburg himself; while on the female side of his pedigree are distinguished matrons, including the famed Dance family. Hamburg's dam was Lady Reel, a half-sister to that great race horse, Domino, and in addition there is also the Virgil and Glencoe strain.

Taking into account the prices paid in recent years for other great racing thoroughbreds, horsemen expected Hamburg to bring anywhere from \$80,000 to \$100,000. Flying Fox, the Derby winner, fetched \$191,000, a year ago; St. Blaise brought \$100,000; while for the imported Meddler, recent lord of La Belle harem, Mr. Whitney paid just under \$50,000.

Hamburg will preside over a carefully chosen lot of brood mares, and amid surroundings fitted to a stallion of his distinguished ancestry; La Belle farm, near Lexington, Kentucky, is no doubt one of the most perfectly appointed breeding establishments in the world, and even previous to



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HAMBURG.

its purchase by Mr. Whitney was the home of many famous horses, including Kingston, Burlington, Ben Brush, and La Belle.

**Federal
Law
Protecting
Wildfowl.**

It is gratifying to know that the sentiment for the absolute protection of duck and snipe, during their mating and breeding season in the spring, is growing stronger and broader. There is even arising a hopeful belief that the wild fowl will outlive the spring shooting habit; though it must be confessed the number of ducks diminishes so rapidly as to shake confidence in their survival. Yet there is hope, for reports of restrictive legislation are coming in from many different sections. The Illinois Sportsman's State Association has petitioned the State legislature to prohibit all spring shooting, and to tax every one carrying a gun one dollar, to be applied to the State fund for the preservation and propagation. Indiana is giving evidence of a partial awakening by establishing a bag limit, and in California, where duck slaughter stands unexampled the world over, there is agitation of reform legislation; heaven knows it is needed, for in the slaughter of wildfowl California's unsavory record is literally unapproachable.

But, after all, what we need is a Federal law which will reflect national concern in the gradual extermination of our ducks, and check the slaughter of them before it is too late to do so. It seems as if migratory birds might reasonably be considered as coming within Federal control; and certainly the curses of game protection in the United States are the confliction or total absence of laws, and the indifference of State legislators. Righteously Congress should be the guardian of our game and our forests.

At present spring shooting is prohibited only in Minnesota, Wisconsin, Michigan, Vermont and Rhode Island—five States among thirty-seven whose legislators have revealed intelligent conception of the significance of game protection! In Maine, Massachusetts, Ohio, Connecticut, New York, New Jersey, Pennsylvania—where we might fairly expect the most enlightened legislation on this subject, we actually find the least.

**License
the Gun.**

Although some of the shooting permit recommendations are obviously prompted by local cupidity, yet in my judgment, based on rather thorough observation throughout

America, a gun license law would be of inestimable service in obtaining the desired protection of game in every State. Not a license such as is proposed in Indiana, which will the more profitably enable natives to make the most of deficient game laws, but a license which will drive the vagrant pot-hunter to cover. Unquestionably it would have a potent influence in minimizing the out-of-season shooters, and in facilitating their arrest by the game wardens. And in my opinion a separate license for shot gun and for rifle should be required.

Add to an imposed and reasonable license, the honest enforcement of protective laws, and the game of a State will multiply. I particularly commend this thought to the gentlemen of Indiana, and to those also of Michigan, who, by raising the license fee of the non-resident sportsman, are fatuously seeking to mend the damaging results of their own stupid laxity.

**Single
Headed
Game
Commissions.**

Governor Odell's (New York) recommendations that the Forest, Fish and Game Commission be reduced from six to three members is a worthy one, provided the proposed amendment of the existing law implies gubernatorial power to make each commissioner solely responsible for one division of protective work. Otherwise the suggestion has only its economy to commend it. There is no question of the advisability and strength of single-headed commissions; they aid the work of an honest incumbent, and serve as a check on the mere political or corrupt appointee; the knowledge that he alone is responsible to the people and that every questionable action can be traced directly to his door, has a tendency to keep an official at least somewhere near the mark. But unless this apportioning of responsibility is a part of the new scheme, mere reduction of members will not give us a single-headed commission.

**New York's
Record-Making
Game
Commission.**

The present Forest, Fish and Game Commission, appointed by ex-Governor Roosevelt, has earned the gratitude with which intelligent New Yorkers must review its work. In checking pollution of streams alone, its service has been of inestimable value, not merely to sportsmen, as we hear so often proclaimed by

stupid people, but to every resident of the State. For pollution of streams has not only to do with the lives of fish, the pleasure of anglers, or the dividends of pulp mills, but it has to do with the water we drink; as Mr. W. A. Wadsworth—the Commission's president, and who has been indefatigable in his labors, especially in this direction—says, "We are a water drinking people, and we are allowing every brook to be defiled. it is not necessary to destroy or hamper any industry in order to prevent the pollution of water courses. What is really needed is to check the criminal selfishness of those who would rather poison their fellow citizens with their offal than to spend a few dollars to take care of it."

But this excellent Commission's activity has not ceased with its efforts to give New York untainted drinking water; perhaps the best indication of the trend of its good work is furnished by the splendid recommendations it has just offered the Legislature.

Among these some of the most important and most positive are:

That the Constitution be amended so as to provide for the practice of conservative forestry and the sale of dead, dying or mature timber under proper safeguards.

That limited portions of the State lands be set aside as game refuges, within which boundaries the killing of wild animals be absolutely prohibited.

That the anti-hounding law be permanently extended, and no breed of dogs which will pursue deer be allowed in the woods at any time.

That the killing of does be prohibited at all times.

That spring duck shooting be prohibited.

That after streams have been stocked or restocked they be closed to public fishing for a term not to exceed two years.

A Commission that utters such sentiments and has at the same time so practical a conception of State requirements, should be continued in office indefinitely. We trust Governor Odell will, in what he has to do with Game and Forest Commission matters, live up to the high standard set by his clear headed and politically untrammelled predecessor, Theodore Roosevelt; we must hold him responsible for the men (to be) appointed under the new (his own) scheme. Certainly every educated voter of New York will wish Mr. Wadsworth to have the leadership of the proposed new commission.

Game Refuges Surest Protection.

The establishment of refuges, as recommended by Mr. Wadsworth's Commission, has a significance in the matter of game protection which stretches far beyond the borders of any State. Those who are students of the subject long ago reached the conclusion that only by such means can the final extermination of American big game be prevented. There must be other harbors of safety like Yellowstone Park, wherein game may not be killed under severe penalty of law, and where breeding may proceed naturally and without fear.

It is a subject which has been much discussed at recent meetings of the Boone and Crockett Club—that body of prominent sportsmen, who shun newspaper notoriety but whose influence and individual efforts have, as a matter of fact, been responsible for a great deal of the State and national legislation looking to the protection of big game and the preservation of our forests. A committee for the preparation of data has been appointed by the Club and it is proposed to present the matter to Congress, and to strive for the enactment of a law which will authorize the establishment of these refuges under such protection as obtains in Yellowstone Park. The feasible way, and a very simple one it is, of providing these governmental asylums, is by making national game preserves of the forest reservations throughout the United States. This would give not only perfect protection, but through the natural overflow into surrounding country, yield better shooting than can be had to-day.

This refuge question is undoubtedly the most important one to have come up for consideration; it simply must become national law, else the extinction of the deer and of the bear families is in sight. Colorado, where game is being outrageously slaughtered by kind permission of the State legislature, is providing a startling exhibition of how rapidly game can disappear off the face of the earth, when adequate protection is not given.

Another subject the Boone and Crockett Club is taking up is provision of game laws for Alaska; it is reported that the Kadiac bear, a specimen of which rarely finds its way into the United States, is being slaughtered for its skin and bones, because of the large prices offered by the English and Continental furriers and scientific associations. It is even said that this great bear,

the largest in all the world, is in danger of extermination, therefore the influence and good offices of the B. and C. Club will be exercised none too soon.

**Vanderbilt's
Athletic
Record.** So far as concerns the student *bona fides* of its two questioned football players, Fugler and Jenkins, Vanderbilt has made con-

vincing and entirely satisfactory reply. Indeed I am somewhat puzzled to understand how our Southern correspondent could have reported as coming "out of the North at the eleventh hour," two men who had scarcely ventured beyond their own State lines before going to college; and I sincerely regret that OUTING's Football Department should have been the medium of circulating a statement so unjust, in its implications, to Vanderbilt. But the friends of Vanderbilt have assumed for that university criticism not at all intended for it. Vanderbilt's commendable career in Southern athletics is as familiar to me, perhaps, as to the most enthusiastic of its supporters; I know it well as the Southern pioneer in sport, for sport's sake—for long almost the only Southern college fighting semi-professionalism. There is no question of its having been and of its being, the leading disciple of amateur sport in the South.

So, too, am I aware, as my pen has frequently borne witness, of the excellent work the Southern Intercollegiate Athletic Association, has accomplished and is doing; yet I must indorse so much of the departmental comment of last month, as charges the Association with lack of aggression. And this has not reference to the president, but to the individual colleges of the organization, which are not attending to their duty with proper care. There are members of the Association who violate the ethics of amateur sport, whenever they get an opportunity, and they should be much more severely dealt with by the official Association than hitherto. Offenders are not pursued relentlessly and punished with appropriate severity.

As for Virginia and North Carolina, distance, which rather puts out of the question games with the Association members, is no excuse whatever for not subscribing to the very excellent Association rules, especially as these two need rules as much as any insti-

tution in the South. There must be more honesty of purpose in general Southern football; more real sympathy with sport for its own sake, among faculties. Particularly a sharper lookout must be maintained to keep men off the teams who have played on professional or semi-professional baseball nines; nor should instructors be eligible to either school or college teams.

**Middle
Western
University
Professional
Baseball.**

What to do with candidates who have played on semi-professional or professional baseball nines, is a problem which is just now confronting the friends of wholesome college sport in the middle West.

Most of the college nines in that section, notably those of Chicago, Wisconsin and Minnesota, habitually have used men who during the summer vacation have played on local teams throughout the middle West and received money for their service. This has been worked by that ancient method of ostensible clerkship in a hotel, law office or other business house in the home town of the ball nine, so that the man can show a written contract to prove that he receives a salary for "office work" and really plays baseball "for fun." Of course the "office work" is a mere blind, yet it is practically impossible to prove professionalism.

I have been asked what is to be done in such cases, and I answer unhesitatingly—disqualify on suspicion. It is the only procedure, and the health of college sport demands drastic action. It is a matter which can only be cleaned up by first and honest intentions of the university faculties, because a rival college can literally prove nothing against such kind of men on the nine. And the manner in which the Middle Western faculties meet this situation, will lay positively naked their real sentiment touching the ethics of college sport. Minnesota, I am pleased to see, is giving the truest evidence a university can give of its sympathy with wholesome sport—*i. e.*, it is cleansing its baseball of questionable amateurs, without being forced to it by a rival's protest. Good work, Minnesota! We are waiting to hear from Chicago and Wisconsin.

There are other important college matters which for lack of space I am obliged to leave until next issue.

THE GUN

TELESCOPIC RIFLE SIGHTS.

THE Ordnance Board of our Army has recently approved a telescopic rifle sight made by the Cataract Tool and Optical Co., of Buffalo, N. Y., and a dozen United States magazine rifles fitted with these sights have been issued to sharpshooters for practical test in the Philippines. The Navy Department is also experimenting with telescopic sights of the same pattern.

The fault of most telescopic sights has been that their mountings were too delicate for field use. No telescope on a rifle is practical unless it is optically reliable, and the lenses and cross-hairs are so set as not to be displaced or injured by the jar of recoil, and the mounting will stand the chance thumps that any gun must expect in actual service. The slightest error of alignment is fatal to accuracy. It is claimed that the new 'scope is perfect in these respects, and that it enables a sharpshooter to take accurate aim on a man at 2,000 yards, even in hazy weather, or against unfavorable background.

Any practical contrivance that will assist one's vision when shooting under service conditions is worth encouraging; for superior marksmanship wins in modern war. But too much should not be expected of a telescopic sight. Military rifles must be improved far beyond their present capabilities before they can "pick off a man at 2,000 yards" except by accident—no matter how accurately they may be aimed. Let us be thankful that this is still an imperfect world, so far as war mechanism is concerned.

A NEW AUTOMATIC RIFLE.

THE science of extermination is already too far advanced. Not content with dynamite, nitro powder, and mushroom bullets, our inventors are now turning out automatic rifles that promise to work well, from a mechanical standpoint. The latest pattern of these murderous affairs has been patented by J. M. Browning, whose reputation as inventor of most of the gun mechanisms made by the Winchester Repeating Arms Co., and of the new Colt automatic pistol, warrants the belief that he will succeed in the peculiarly difficult task of designing a practical automatic rifle.

The Browning rifle, like others of its class, is operated by recoil. Its barrel, which is inclosed in a sleeve or tube, is free to slide longitudinally. Both the barrel and the breech-bolt fly backward under the impulse of recoil. They are locked together until they reach the rearmost position, when a spring catch

holds back the bolt-carrier, while the barrel is forced forward by another spring. During the instant that the barrel and bolt are thus disconnected, the empty cartridge shell is ejected, and a fresh cartridge springs up from the magazine. When the barrel has returned to its normal position, the bolt is released and flies forward, thrusting the new cartridge into the chamber, and relocking itself to the barrel. The rifle will fire continuously until the magazine is emptied, so long as the trigger is held back; or, the rate of fire can be controlled by the trigger finger.

FULL-MANTLED BULLETS ON GAME.

SOME of our best hunters in the west use full-mantled bullets in preference to soft-points. Their reason is that such a bullet does not spoil meat, and that if it misses a vital spot, the animal is not seriously injured.

This is all very well in a country where game is plentiful and the hunter can select his mark. I killed a deer last fall with a 160 grain full-mantled bullet and 15 grains weight of smokeless powder, as I happened to be hunting turkeys and had this load in the gun. But I could have done as well with a .22. The deer stopped within 50 yards when I spoke, and stood quartering towards me with the side of its neck fully exposed. The ball broke its neck and came out through the opposite shoulder. A cannon ball could not have killed the animal much quicker. But now see.

A companion who was with me got a similar shot at the same time, for there were two deer trotting along the same trail, near which we sat motionless. He used a full-power load, with soft-point bullet, and shot his deer straight through the neck. My bullet left so small a hole on the opposite side of the animal that not a drop of blood escaped. Suppose the deer had been on the jump, and I had shot it through the paunch. That deer would have run far out of reach, and I could not have tracked it. The poor beast would have suffered lingering agony, and would have died many hours later, leaving only a meal for the buzzards. My comrade's bullet expanded, and made a shocking wound; but it would have done the same if it had hit the soft parts, and the deer would have been knocked flat, and secured. The soft-point bullet is humane. It expands even on a deer's hide, and there can be no doubt of the result.

Never use soft-points with reduced charges. Their power depends upon the velocity with which they strike.

"A FOOL I' THE FOREST."

THE increasing number of men who are mistaken for deer, and killed or maimed by excited tenderfeet, is calling up general discussion. "Stop the sale of firearms!" is becoming a common cry. It is a hysterical cry; because the right to own and bear arms is a natural right of man, guaranteed by our Bill of Rights, but superior to all laws and constitutions. It is our only defence against tyranny, and, as such, will never be relinquished by Americans who respect their birthright.

The only practicable way to lessen the number of accidents with firearms is to teach men and boys how to use them in a common-sense way. Experienced marksmen do not shoot themselves or other people by accident. I have associated with riflemen and gunners for years; have participated in scores of tournaments and hunting trips; have seen cartridges fired by the hundred thousand; have shot, and have been shot; but I never heard of a trained marksman hurting anybody by accident, unless it was clearly the victim's own fault. We need a national system of instruction in rifle shooting. If the sale of firearms were restricted to those who produced certificates of qualification, signed by authorized instructors, and won on legalized ranges, with arms supplied by the range-master, our percentage of accidents would decline, and we would become what we once were, should be, but are no longer, a nation of marksmen.

A FACT to be emphasized in this connection is that the modern type of high-power rifles is not, as many hasty writers claim, chiefly responsible for the increased mortality of deer hunters. Deer, whether real or suppositious, are invariably shot within ranges at which an old-fashioned .44-40, or even a .22, would kill a man if it hit the right spot. What more can a .30 do? It is a common blunder to suppose that modern rifles are so accurate that any tenderfoot can hit his mark with them. No rifle shoots straighter than it is aimed. It is as easy to miss with a high-power rifle as with any other, save in the one particular of judging distance. Now, most deer are shot within 100, or, at most 150 yards—usually much less; and what does the difference in trajectory amount to within such short range? It is a bagatelle, so far as hitting a man is concerned. The truth is that a tenderfoot is more likely to miss with a pow-

erful rifle than with a weak one, for two reasons: first, because he is more likely to flinch; and, second, because he has heard so much about the killing power of high explosives and jacketed bullets that he thinks all he has to do is to blaze away at random, and that the gun will do the rest. If, on the contrary, he knows that his gun cannot kill unless it hits a particular spot, he will be more careful in aiming, and consequently more dangerous.

The risk of being killed at long range by modern rifles recklessly discharged at high angles is no greater than that of being killed at short range by weaker arms similarly discharged.

THE LIFE OF MODERN RIFLE BARRELS.

I AM often asked whether the barrels of high-power rifles wear out rapidly. As a rule they do not. In spite of the friction of unlubricated steel-mantled bullets driven at great velocity through a 10-inch twist, and in spite of the heat generated by high-pressure powder, the barrels last longer than an average man has use for them.

I have a single-shot .30-40 Winchester that has been used as an experimental piece, and as a hunting rifle, for several years. I have fired many thousands of rounds from it, with factory cartridges, and with shells that I reloaded. I have used steel-mantled bullets, copper-mantled, hardened lead, and wire-wound bullets, and many kinds of powder. I have purposely let the barrel go uncleaned for weeks at a time, until it became superficially rusted in the bore, and then shot it without cleaning; just to learn what it would stand. This abuse was intensified by hard service in the field. To-day the rifling shows some wear, but the gun still puts a long series of shots into a 6-inch circle at 200 yards, when tested from rest with full-power charges.

Of course, no sportsman would treat a gun so shabbily, except as an experiment; and no manufacturer would guarantee his barrels to shoot well after such abuse. But the experience gained with this gun tallies with that of all my friends who use high-power rifles.

A MID-RANGE BULLET FOR THE .30-40.

Since my article was written for the January number of this magazine, describing a mid-range load for the .30-40, the Union Metallic Cartridge Co., of Bridgeport, Conn., has placed on the market a 180 grain full-mantled bullet of proper caliber for the .30-40. A well-known expert, Dr. Walter G. Hudson, of New York City, reports that it is accurate up to 800 yards, when properly loaded.

HORACE KEPHART.

ANGLING

THE ANGLER IN FLORIDA AND THE GULF.

FEW angling tourists visit the waters of the Magnolia State until the middle of February, and some of the wiser ones do not reach there until the middle of April. They know that the fishing improves with the spring months. In fact, the best fishing—and its quality would astonish the winter angling tourist—is during the summer months, when the tarpon literally swarm along both the east and west coasts. In July and August, as far north as the mouth of the St. Johns River, the Silver King is almost as common as the squeteague, or weakfish, in the waters of the Eastern and Middle States.

The migrations of the tarpon appear to be from the Mexican Gulf coast, particularly the waters adjacent to Tampico, where they are found in great numbers, thence along the Texan coast, and from there to the waters of Louisiana and Florida; a few stragglers coming as far north as Buzzard's Bay, Mass. At Corpus Christi and Aransas Pass, Texas, they are found in vast schools, from August to November; but if a gale appears from the north, with a sudden chill, lowering the temperature to the frost line—about forty-two degrees in Texas—they leave these waters at an earlier date, and go on their southeastern migrations, to the coasts of Louisiana and Florida. During the latter part of November, and in December and January, only stragglers are taken in Texan waters, the main body migrating slowly eastward, giving relatively good, but brief fishing in Eastern Texas, particularly at Galveston, where the local name for them is "Savanilla." During the winter months they appear to avoid the coast line of Texas, doubtless seeking the warmer waters of the Gulf Stream until they reach the higher temperature of those of Florida.

I HAVE found them most numerous in Texan waters in the month of October, particularly at Aransas Pass, where I have seen, within two hundred yards of the beach, at least fifty tarpon simultaneously leaping and frolicking in the air, of which five were fastened to the hooks of fishermen. So numerous, indeed, were these fishes in the inlet, only about half a mile wide, that it was dangerous to cross it in a small row boat, and it was seldom done without the craft being struck by a tarpon, or water being splashed into the faces of the occupants of the boat, by the leaping fish.

Until the last few years, the practice prevailed, in Florida, of still-fishing for tarpon, by

casting a mullet bait fifty to one hundred and fifty feet from the boat, letting the line lie upon the bottom, and patiently awaiting "a draw," which might possibly occur in a few minutes, or not for a week.

The methods of fishing for tarpon have greatly changed during the last five years, and no angler can visit Florida at the present time, and fail to kill a Silver King, if he fishes intelligently for them. Following the method adopted in Texan waters from the earliest days of tarpon fishing, the boat is anchored in the narrow waters of a "pass," or inlet, where the tide is generally very swift. The boatman is ordered to row slowly against the tide, when it is not rapid. A troll is used, and about one hundred feet of line is trailed, having a piano-wire snell and a fish lure at the outer end of it. With this tackle, and in a narrow pass, seldom is the angler disappointed in hooking onto one or more fish in a day's outing, although but one fish, out of five or six hooked, is safely boated.

IN the old-fashioned still-fishing, if a fish took the bait, it was allowed to draw out, without restraint, twenty-five to fifty feet of line, thus giving it time to swallow the bait; and the hook, being well down in the gullet, the fish could not eject it when leaping and shaking its head, and "a draw" almost invariably was followed by capture, if the tackle was strong and properly handled. By the more modern practice above described, now in general use, the lure floats near the surface of the water, and the tarpon is hooked in the jaws, and frequently, by leaping and frantically shaking his head and body (he can't shake one without the other, albeit the reverse is recorded by angling writers), throws out the hook; hence the infrequency of the capture of hooked tarpon.

The tarpon pass through, on their migrations to the upper waters, all the inlets in Florida, from the Homosassa River to Key West, on the Gulf coast, and from Key West to Mosquito inlet on the eastern coast of the state; but from January to May the waters of the Gulf are most fruitful to the angler.

No game-fish is as timid as, or more easily frightened than, the tarpon. When hooked, he becomes frantic in his actions, leaping five to six feet into air, gyrating and convulsive in the rapid movements of his body, shaking violently every inch of it in efforts to eject the hook; and even when this is accomplished, and he is a free fish, I have seen him leap frantically at least five times into the air, with a portion of the broken line hanging from his mouth.

ALL the leading tackle houses make a specialty of tarpon outfits, and the angling tourist cannot fail to be thoroughly equipped, if he purchases from a reliable firm.

The visitor to the fishing waters of Florida will find several other valiant game fish, in addition to the tarpon. Probably the most worthy of these is the channel bass or red drum, which certainly, when caught by casting for them in the surf, taxes the physical powers of an angler more severely than does the tarpon. The most exciting method of catching this fish is by wading waist deep into the surf and casting, if practicable, beyond the outer breakers. As the channel bass frequently weighs thirty pounds, the angler will find that he cannot fish more than an hour or two, when fighting both the fish and the incoming breakers, which, at times, o'ertop his shoulders. This fish is found all along both of the coasts of Florida. In August it is caught at Brigantine Beach, near Atlantic City, in large numbers, and of great bulk. These fish seem to increase rapidly in weight during their northern migrations. They seldom weigh more than thirty pounds in their Floridian habitat, but are frequently caught on the Jersey coast, weighing from forty up to sixty pounds. The ordinary tackle used in sea fishing for striped bass is generally in use for channel bass fishing.

ON both coasts of Florida the Spanish mackerel is found in large schools generally a mile or so from the beach line. They are caught by trolling, and a mottled ivory squid seems to be the most attractive lure.

The Crevalle may be said to be ubiquitous. They are found everywhere in the salt waters of both the east and west coasts. The pompano cannot be said to be strictly an angling fish, as it is only in the Indian River, on the east coast, that it is taken with hook and line as a daily sport. It is fished for with a small hook baited with a minute piece of clam, and is usually taken on the incoming tide, at the mouth of inlets. The ordinary weakfish tackle used in the Northern States is sufficient for the capture of the crevalle, the ladyfish, and the other medium-size game fishes.

I have never visited a section of the salt waters of Florida and failed to find the sheepshead in great numbers. It was my custom, when fishing for sharks, to use a sheepshead,

worth fifteen cents a pound in Fulton market, as a lure; and it was a good one.

The mangrove snapper is perhaps the most muscular fish, for its size, in southern waters. A three-pounder on weakfish tackle will give a sturdy fight of half an hour's duration, and only succumbs when utterly exhausted. It is a delicious table fish, and when taken fresh from the water, is resplendent in beauty of coloration: the bright red spots on the dark olive background glow with a peculiar and exceptional brilliancy.

THE blue ribbon for gameness, is universally awarded to the bonefish of Biscayne Bay, Florida. When hooked it may be said to literally "dance on its tail"; it is out of the water nearly all the time before it is boated, not leaping, as do most other game fish, so called; but, holding its body nearly perpendicular, it manages to skim the surface, with the tail just touching the water. A modified action of this kind is often seen in the big-eyed herring, allied to the tarpon, and often called the lady or bony fish. It is found everywhere on both coasts, but the true bonefish makes its home only in Biscayne Bay; at least, I have never known or heard of a true specimen being caught in any other water.

The angling tourist should not fail to take a fly-fishing outfit to Florida. It should consist of a ten-ounce fly-rod, a dead-finished, water-proof silk line, longest size made for trout fishing, a book of large black bass flies, gimp snoods, leaders of ductile wire, and a jointed, long-handled net. Wherever the angler finds the mouth of a relatively shallow creek, he will find, on an incoming tide, crevalle, sea-trout, mangrove snappers, big-eyed herring or ladyfish, and occasionally a Spanish mackerel, all of which will take the moving artificial fly. The angler can duplicate, in a measure, his experience in trout fishing, as he must wade the creek waters to properly fish the pools, which on the first of the flood tide exist here and there in the stretches of the creeks. When tired of fly-fishing, his noonday lunch is at hand: he will find oysters on the mangrove trees when the tide is half-flood, and, if he works his toes carefully in the bottom sand, he can take out a clam, of the quahaug tribe, which is apt to be big enough to make a meal for a quartette of fishermen.

WM. C. HARRIS.

FORESTRY

Conducted by Gifford Pinchot

FORESTER OF THE U. S. DEPARTMENT OF AGRICULTURE.

CONSERVATIVE lumbering, which is often the best name for forestry, is not yet so generally understood that it does not require frequent explanation. The widespread feeling that something ought to be done is finding constant expression in a direct demand to know just what is needed. It has been the policy of the Division of Forestry, for the last two years and more, to answer the general question on this point by making practical examples of forestry on the ground. A typical instance of such answers is the preparation and execution of a forest working plan upon the domain of the University of the South, at Sewanee, Tennessee, which lies about forty miles northwest of Chattanooga, and extends over several thousand acres on the Cumberland plateau, and in the coves or ravines which run into it.

Agents were sent to examine the forest and report upon the conditions therein. Valuation surveys were made, and upon them were based estimates of the amount of timber standing in the different portions of the tract.

The woodland on the plateau in general was found to be scrubby and unhealthy, with scattered individuals and groups which indicated to what dimensions the trees might under favorable conditions, attain; but there were very few trees from which saw logs could be obtained. The more valuable species had been removed, and the young trees were chiefly of the less desirable kinds.

This poor condition of the plateau forest is due to fire, grazing, and indiscriminate cutting. The coves are well timbered and contain many splendid specimens of the species represented. There have been fires and cuttings in the coves, but not to nearly the same extent as on the plateau.

THE tract is a combination of two very common types of forest land. The plateau forest is typical of that large portion of the woodlands in the long settled regions of the United States, where the demand for timber has been great and it has been cut without any thought for the future, while the cove forest corresponds to the tracts of virgin timber which have remained untouched on account of their inaccessibility, or for some other reason.

The University has no money to expend upon improvements of the forest, and, while it desires the largest possible money returns, it is not willing to reinvest any of that revenue in the forest.

The problem which the Division of Forestry had to solve, then, was to get as much money

out of the forest as could be, without harming its chances for future improved productiveness.

THE plan of the Division advised the removal of such trees as could be sold, specifying the amount to be cut and where the trees should be taken from. Agents were sent to mark the timber to be cut, and one remained to see that it was done properly.

In order to begin the work of improving the plateau forest at once, half-way measures had to be adopted. Selection was made of enough undesirable trees for a season's work at converting them into ties and firewood. Whenever a saw log was obtainable, it was to be gotten out. The firewood to be cut from the tops of the felled trees only, thus getting something from what is usually wasted, and removing from the forest a great deal of the danger from fire.

The working plan not only directed what trees should be cut, but it also told how. The lumbering contractor was required to cut the stumps as low as possible, in order to avoid the waste from high stumps which is so common in logging operations. Care in felling, skidding, and hauling was insisted upon, in order that as little damage as possible might be done to the young growth, because upon it depends the future crop. Each tree to be removed was branded, and the overlooking of a marked tree, or the cutting of an unmarked one, was strictly forbidden.

Work under the above plan has been going on for six months, and the results have been satisfactory in every way. The money returns have been large enough to satisfy the University, and the condition of the forest is excellent. If ordinary logging practice had been followed at Sewanee, the result would have been that all the large trees of the most desirable species would have been removed from the plateau forest, leaving no seed trees and almost ensuring that the next crop would be of the valueless kinds which are creeping in wherever they find an opening. The coves would have been stripped of about all their trees, from the severe cutting and the damage incidental to careless work.

Examples of practical forestry are being rapidly established by the Division of Forestry in many parts of the country. The South is well represented in the applications for assistance, and next summer will find the investigations preliminary to the preparation of working plans being made in East Tennessee, Georgia and South Carolina and elsewhere.

KENNEL

THE NEED OF "CONDITION" IN THE SHOW RING.

THE time when dogs could be taken into the ring without careful preparation and win premier honors is forever past. To-day if they are to win they must be eminently "fit." They are on "dress parade" when in the ring, and any slovenly appearance, either in form or manner, militates against them. They should be shown neither too fat nor too thin, but the bones should be well covered—that is, round. If a dog is possessed of heavy or cloddy shoulders, if he shows coarseness in outline, or is inclined to be throaty, he appears to the best advantage when he errs on the side of leanness, but in one that is too leggy, slack in loin and lacking in general substance over weight is infinitely preferable to under weight. Dogs that are throaty or are bad on the feet, or do not stand well at the shoulders, are often made to appear less faulty by the way they are handled, covering up the defects as much as possible by keeping them well off their front feet.

ERRATIC JUDGING OF THE ENGLISH SETTER.

THE English setter as a show dog is deteriorating under the influence of the uncertainty as to the kind of judge he will go before. A field trial judge sees "Hoodoo" win everything before him. "Hoodoo" is a big slashing dog, a rapid mover and a wide ranger; he finds all the birds, points and backs to perfection, and wins "hands down." He is a big slab-sided, splay-footed, raw-boned, heavy-headed, thick-skulled, long-backed dog, but in the field he certainly is a wonder. Presently this field trial judge is judging in the show ring, and he can see no dog in the class except "Hoodoo," so he gives him everything. A month later another judge officiates, at a show where the same dogs are entered. Then "Hoola Hoola" wins, a wastrel, little snipey-faced dog, with a greyhound head, short-backed as a pug, and as high on the leg as an ostrich—another type. And so it goes from show to show, until we have as many types of English setter as Joseph of old had colors in his coat.

THE COCKER SPANIEL'S SURVIVAL.

THE cocker spaniel's is even a more remarkable case. We have had him with a back as long as a crocodile; we have had him with literally no back at all; we have had him all ears, like a jackass; we have had him with nothing but a grand coat, whereas he should be "all dog"; and such he is worthy to be. Of late the dividing line between him and the

long and low field spaniel was but little removed. His weight was increased, entirely regardless of standard or judgment. He was low on the leg at one time, and high on it at another, until in self-defense a new standard has been evolved, and we shall soon know what sort of a looking dog the cocker should be.

THE FOX TERRIER IS TOO HEAVY.

THE fox terrier, too, in the last ten years, has been a victim of the faddists. This dog was intended primarily to unearth a fox, and for that purpose he had to be small and compact, and not like many of to-day's winners, which greatly resemble large whippets. We have greatly increased the size of our fox terriers, but we have not made them proportionately strong. Lathy specimens are in strange contrast to such grand little ones as "Rabymixer" and "Lucifer," each of whom only weighed seventeen pounds; many dogs of to-day weigh twenty-two pounds. The heads of some of the modern fox terriers are not unlike the Russian wolfhounds. They are weak before the eyes, lacking in punishing power, and are devoid of true terrier character. It is true that the front legs are very straight, but they are so close together, and the chest is so narrow, that the heart and lungs are too much contracted to give the respiratory organs free action, and without that of what use is a fox terrier? With these faults we can hardly expect anything but a leggy, shallow-bodied, weak-boned dog; a counterfeit presentment of a true fox terrier.

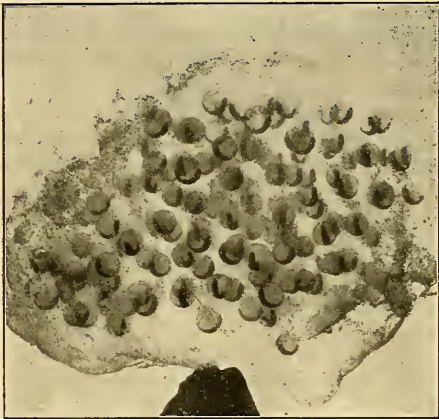
A WORD OF ADVICE TO DOG EXHIBITORS.

BEARING in mind the varying opinions of judges, if your dog is beaten don't inveigh against the judge because you have not won: weigh the conditions of the show and if on a fair comparison you realize your dog is not a winner and is not again likely to be, sell him for the best price you can secure. If you are not in the position to indulge in the extravagance of purchasing the very best, possess your soul in patience until you are. There is certainly no profit or gratification in owning only second or third-raters. They are ever a source of disappointment and an expense that brings no gratification. Better be the owner of one solitary dog that needs no apologies and can win over the entire show, than have a kennel of a dozen dogs, the best of which cannot get above a V. H. C. card.

H. W. HUNTINGTON.

PHOTOGRAPHY

A NOVEL branch of photography, which offers far-reaching and extremely interesting possibilities to the out-of-door amateur, has recently been opened up by M. Louis Boutan, of the School of Zoölogy, Paris. Monsieur Boutan, who is a naturalist, whilst studying certain Mediterranean shellfish at the marine laboratory at Banyuls, often, in order to observe living specimens, found it necessary to descend into the sea in an ordinary diver's dress. While thus engaged, he was frequently impressed with the beauty of the submarine scenery, with its fields of tall, waving grass, weed-covered rocks and shoals of many-hued fish, and a desire to preserve permanent records of it led him to attempt to take submarine photographs.



FROG SPAWN PHOTOGRAPHED UNDER WATER.

Perhaps the most important fact which he has established is, that instantaneous photographs can, with proper appliances, be taken at any depth to which a diver can descend. Another point he has demonstrated, of even greater consequence to the average amateur is, that at reasonable depths, where the bottom can be seen, or where its character is well known, successful pictures may be taken from a boat, without the operator entering the water. The *Photographic Times* has recently published a photograph of a diver taken under water in this way. The subject was at a distance of thirteen feet from the instrument, at 11 o'clock on a bright, sunny morning.

No doubt in many cases, especially in first experiments, a dock or a pier could be used with much greater safety and convenience.

M. Boutan uses a camera encased in a strong metal box, the lid of which, to insure its being water tight is screwed down over a sheet of rubber. In the side of the box is a glass

window, and through this the lens looks out into the water. At great depths, of course, the pressure of the water on the sides of the case is tremendous, and to equalize it, a hollow rubber ball, containing about three quarts of air, is sunk with the box. The interior of the ball is connected with the interior of the box, and the pressure on the ball causes a corresponding pressure on the inside of the box. An extension tripod is used, its iron legs and table made so heavy that it will not only sink rapidly, but will stand firm.

It is found that in anything but exceptionally clear water the use of daylight is impracticable beyond a depth of from sixteen to twenty feet. Even at these depths it is necessary to give an exposure of from thirty to fifty minutes, and the photographing of moving objects is, under these circumstances, of course, out of the question. At a depth even of four feet, a plate requires five times the exposure which is necessary in the open air. This makes artificial light an essential, except in very shallow water; for moving fish and waving seaweed must be taken instantaneously.

ELECTRIC lighting has proven entirely satisfactory from a photographic standpoint, but it is expensive and somewhat difficult to manage from a boat. The lighting apparatus which, all things considered, has been found to give the best results, consists of a lamp, connected with a reservoir of oxygen gas. This lamp, which is inside a globe, is sent down lighted. Connected with the globe by means of a blow-pipe, is a ball filled with magnesium powder, with which a vivid white light may be created whenever the operator desires.

Monsieur Boutan has already done some very interesting work, and as he is shortly to publish a book, it is to be hoped that he will still further acquaint us with his methods. But, naturally, this is only the beginning.

While giving full credit to M. Boutan for the invention of his ingenious and interesting apparatus, it is only fair to state that another instrument, exactly similar in all essential particulars, was independently invented years ago by John Baynes, of Stamford, Conn.

The accompanying photograph of frog-spawn was taken under water by the writer, by another method, concerning which he is not at liberty to speak at present. The picture represents the jelly mass spawned by the female frog early in the spring, with the globular eggs, which appear a few days later, each with an embryo pollywog curled up inside.

ERNEST HAROLD BAYNES.

INTERSCHOLASTIC FOOTBALL REVIEW

SEASON OF 1900

IT requires considerable courage to attempt a review of the interscholastic season. To do it adequately is utterly out of the question, considering the countless school teams in the United States. In view of the impossibility of covering all the ground I have therefore selected those teams which seem most prominent, most successful, and (my chiefest concern) those in which the standards of good sportsmanship have been most fully met. No doubt teams deserving cordial recognition have, by force of circumstances, been omitted from the discussion.

Generally speaking the teams seem to have been unusually light. True, Andover and Exeter outweighed the Princeton Varsity eleven, but they were exceptions. Perhaps seventy-five per cent. of the school teams discussed in the following paragraphs weighed less than the elevens which have preceded them in recent years. Some reached high points of excellence as for examples: Exeter, St. Marks, Hill School and Mercersburg. Others developed the usual quota of star individual players, of whom might be named Hinkle of St. Marks, Hogan of Exeter, Collins of Andover, Oveson of Hotchkiss, Bowman of Hill, Delaney of Mercersburg, and Bolton of University School, Cleveland.

The systems of play in the schools have but reflected those of the larger college teams.

While the spirit of the game at most of these institutions has been wholesome and fair, there is still ground for criticism in some instances. There should be no scholarships or

other financial inducements to school football players; a proper average of proficiency in class-room work should be rigorously exacted; foul play, needless roughing, and all "muckerish" tendencies should be contemptuously shunned. There is one other point in regard to which the writer would like to see a change. It does not seem proper that instructors should be allowed to play upon school teams even though there be a previous understanding and agreement in relation thereto. The presence of college graduates on school teams under any circumstances is not wise, and does not serve to promote the purposes for which the game is permitted to be played in our schools. It also introduces many other complicating issues.

EXETER 11—ANDOVER 0.

THE outlook for a winning team at Exeter was at first not considered favorable, although five of last year's regulars and as many more substitutes were available, and much new material from other schools, but Mr. McCornack (Dartmouth '97) and Captain Hogan pursued the wise policy of building up a team for the sole purpose of defeating the ancient enemy, Andover, and the eleven came up slowly. On November 10th it played its great game, at Andover, and scoring a hard-earned touchdown in each half, won its eighth victory in twenty-one games, this series extending back to 1877. Andover has won ten games, and three have been ties. The two teams were almost exactly matched in weight, but Exeter



R. G. GLASS,
MERCERSBURG ACADEMY.



J. P. DABNEY,
CUTLER SCHOOL.



J. A. COLLINS,
ANDOVER ACADEMY

was much better coached and her physical trim was perfect. Andover's men were, to some extent, crippled, and the others were out of form. They knew too many trick plays and too little straightforward "all hands together" football. When Exeter bowled over their fancy football, Andover's doom was sealed. Brill's kicking averaged over fifty yards in the Andover-Exeter game, which is better than any college kicker has averaged this year, save Cure of Lafayette. Levine, Kinney, Matthews and Collins were conspicuous men at Andover last fall, although Collins's effectiveness suffered severely from injuries. Rockwell, Littig and Connor were, after Hogan and Brill, the most effective for Exeter.

Among other records of the season, Exeter tied the Harvard freshmen, 11-11, while Andover beat the same team 11-0, and tied the Yale freshmen 5-5.

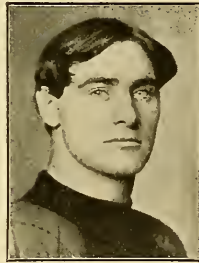
punting, he kicked two beautiful place goals from the field and converted the only touchdown into a goal. Captain Hinkle's work was also superb. The team played well together, relying on straight formations aggressively executed. Although Groton could not meet St. Marks' quick, diversified attack, it is but fair to say that her game against the University School (of Cleveland) a week later, was a revelation to those who had judged her capacity by the St. Marks game.

IN "GREATER BOSTON."

THERE were two scholastic football leagues, the Inter-preparatory, in which Hopkinson won the championship from the Cambridge Latin and other schools; and the Interscholastic Football Association, in which the Somerville High, Cambridge Manual Training and the Boston English High schools tied for



W. P. SMITH,
ST. PAULS SCHOOL,
GARDEN CITY, L. I.



Photo, by E. F. Fuller, Exeter, N. H.

J. J. HOGAN,
EXETER ACADEMY.



CHESTER BOLTON,
UNIVERSITY SCHOOL TEAM,
CLEVELAND, O.

ST. MARKS 16—GROTON 0.

THE St. Marks team, individually and collectively, proved the best which has represented the school in years. It went through the season without a defeat, tying the Harvard freshmen and closing with the cleanest victory a St. Marks team ever scored over its time-honored rival from Groton.

Groton was very streaky in its season's play. Some good work was done, for examples, its victories over Worcester Academy (5-0) the University School of Cleveland (6-5) and several prominent Boston school teams, but against the Harvard freshmen (5-23) and, above all, against St. Marks its showing was poor.

The feature of the St. Marks-Groton game was the kicking of William Earl Dodge, 3d, of St. Marks (who comes by his football proficiency honestly, for his father was famous as the Princeton captain of '77). Besides his

first honors, defeating the Dorchester High school teams. English High had won the championship in 1899, so virtually hold over the title.

The League series resulted as follows:

English High	47	Dorchester High	0
English High	6	Somerville High	5
English High	12	Cambridge Man. Train. . .	17
Somerville High	46	Dorchester High	0
Somerville High	11	Cambridge Man. Train. . .	0
Cambridge Man. Train. . .	63	Dorchester High	0

In this series English High did its best work, its play against several other important teams having been much less satisfactory. It lost to Groton (0-17); Salem (0-11) and Boston Latin School on Thanksgiving Day, 6-12. Captain Connelly, tackle, and Bogardus, end, did excellent work.

Somerville turned out a well-drilled eleven containing excellent material and indeed three men of great promise, viz.: Captain Jones, half, and Graham and Whitaker, tackles.



M. H. BOWMAN,
HILL SCHOOL.



MALCOLM DAVIDSON,
LAWRENCEVILLE.



J. H. KINTER,
BLAIR ACADEMY

Among their victories were the following: Cambridge Latin, 40-0; Melrose, 45-0; Medford, 6-0; Haverhill, 29-0.

Cambridge Manual Training teams are, as a rule, well instructed and thoroughly coached, and the 1900 eleven overcame very poor prospects for that reason. It was light and young. The best men were Holden, end; Carrick, center; Gallagher and Bullock, halves. The team played its strongest game against English High, 17-12, held Harvard 1904 to 0-5, beat Malden 28-0, Cambridge High 16-0, Cambridge Latin 18-0, and Boston High 16-12.

HOTCHKISS.

Although there were three or four excellent individual players (Captain Oveson and Gilbert, tackles; Dutcher, guard, and Stillman, half-back) the distinguishing characteristic of Hotchkiss's play last fall was team work. Half a dozen simple plays learned thoroughly, played quickly and hard, and varied wisely through the heady discrimination of Johnson, quarter-back, this is the story of a powerful offence; and eleven men all regularly following the ball and massing instantly at the point of attack, explains why no team, except Yale 1904, was able to reach the Hotchkiss goal.

Eight games were played, seven of which were won, the total points scored being 114-6. The closing game with Taft school was won by 22-0.

OTHER CONNECTICUT SCHOOLS.

WATERBURY High won, for the second season, the championship of the Connecti-

cut Interscholastic Association, defeating the high schools of Bristol, 11-0; Hillhouse, 23-0; Naugatuck, 11-0; and Meriden, 29-6. Its strong point lay in the unusual weight of its men, reinforced by snap and concerted action.

Hillhouse High, with a light eleven, turned out a fairly strong game, defeating Hopkins Grammar 15-0, and tying Bridgeport High, 0-0; and Naugatuck High, 0-0. Its other games were, however, lost, among them Waterbury, 0-23; Hartford, 0-22; Meriden, 0-11.

Meriden High, Hopkins Grammar, Taft, Pomfret and Betts all had extremely light teams this fall, but played plucky football under discouraging circumstances, all of the teams averaging less than 140 pounds. Taft beat Bridgeport 11-0; Pomfret beat Willimantic 17-0, and a Harvard scrub team 5-0; Betts beat Mt. Pleasant 17-0 and St. Johns (Fordham, N. Y.) 38-0; Meriden beat Hartford 16-5, New Britain 26-0 and 6-5, and Hillhouse 12-0.

Hartford High School won the Trinity College Interscholastic trophies, with a strong eleven, which scored 124 points to its opponents' 28. It beat Springfield twice and St. Marys school 29-0.

IN NEW YORK.

COLUMBIA Grammar had a clear lead over the other New York city schools in the Interscholastic League contest, winning the championship from Cutler (18-0) in the final game. The team contained a pair of heavy guards in Flammer (196 lbs.), and W. Strange

(214 lbs.), a splendid drop-kicking full back in Captain Herché (170 lbs.), and a strong line breaker in R. Strange. It lost but two games, to Brooklyn High 0-23, and Trinity School 2-21, the latter game having been played too soon after the final contest with Cutler.

Cutler's team was another of the many light ones. It beat Berkeley 25-0 and Dwight 10-0, but lost to Morristown 6-11, beside the two games won by Columbia Grammar. Dabney, guard, was the best man on the team and Cutler at center, had no superior in the League. Olney, end; Beals and Cornell, tackles, and Rutter, full-back, also did excellent work.

Dwight's mainstay was Captain Burchard, her full-back, and an excellent player he is. Mackenzie, her crack runner, also showed clever work at half.

Berkeley's team was far below her standard in weight and general efficiency, only three men having played before this year. But three games were played, all of them lost. Lewisohn, center; Maybury, quarter, and Roome, full-back, did the best work.

De La Salle had a strong team, the two Thorpe brothers being particularly good players, but for playing an ineligible man, the team was dropped from the League.

ON LONG ISLAND.

THERE were several good interscholastic teams in and around the Borough of Brooklyn, notably Pratt Institute, St. Pauls of Garden City, Brooklyn High and the Brooklyn Latin school.

Pratt won the championship by a wide margin, defeating Brooklyn Latin 6-0, St. Pauls 24-5, Brooklyn High 17-10, and Polytechnic 72-0, the largest score ever made in a local league game. Its only defeat came from Newark High, 5-6. The strongest players were

Merwin, tackle; Preston, half; White, quarter; Prescott, full-back, and Childs, center.

St. Pauls beat Brooklyn High 16-6 and the strong Trinity team of New York, 14-0. Its defeats came from the Yale freshmen 0-22, the Princeton freshmen 0-39, Erasmus Hall 0-17, and Pratt 6-24. Most of the men made team this year for the first time and their excellent showing is all the more to their credit. Reid and Parsons, halves, particularly the former, proved the best ground gainers, and the other players of note were Captain Smith, guard; Waud, end, and Morgan, full-back.

The best men at the Brooklyn High school were Von Dannenburg, guard; Captain Bamber, tackle, and Wellstood, quarter. These were also the best individual players in the Long Island league.

IN CENTRAL NEW YORK.

ST. JOHNS (Manlius, New York) is noted for its strong, well coached elevens. That of 1900 was one of this sort. It played ten games, losing but two, one to the Princeton freshmen, 6-5; the other to Colgate Academy, 24-0; it defeated the school teams of Cazenovia, Cortland, Colgate (first game), Geneva and Syracuse, and also beat the Syracuse University freshmen 6-5. The best men are Captain Rogers, tackle; Lauterborn, center; Freeman, quarter-back, and Conrad, guard.

LAWRENCEVILLE.

LAWRENCEVILLE's team was but a shadow of the elevens which have made the school famous in the past. The fault, however, was none of the captain's, nor yet of the coach. One big man after another was either hurt, or necessarily absent from the game, until chiefly light and inexperienced men were to be found on the team. The exceptions were Kafer, half, and Weatherhead, quarter, who are very



T. H. CONNELLY,
ENGLISH SCHOOL,
BOSTON (MASS.).



(CAPTAIN) DULUTH
CENTRAL HIGH SCHOOL
(MINN.).



F. B. TERRELL,
SWARTHMORE PREP. SCHOOL.

strong individual players. Davidson and Ritter also did acceptable work as a rule. The season's scores were: against Peddie Institute, 23-0; Mercersburg, 6-22; Princeton, 1904, 5-18 and 0-12; Riverhead Academy 17-0; Pennington, 58-0; Hill School, 0-24.

Blair Academy (Blairstown, N. J.) never had so good a team as the eleven of 1900. Its dash and spirit were exceptional, the men evenly balanced and well-drilled, thus atoning for lack of weight. They won all their games, as follows: against Stroudsburg, 17-5 and 12-6; Newton High, 45-0; Blair Hall, of Princeton, 11-0; New Jersey State School, 27-6; and as a crowning triumph, they defeated Lafayette 1904, by 6-0. Captain Kinter, guard, was the best man. He was an aggressive, sandy, well-furnished player and excellent leader. Splendid work was also done by Umberger and the Hartzell brothers at half; Jessup, center, and Ferris, end.

Morristown School is new and her teams lack the traditions which stimulate the athletics of so many of the schools, but she is building wisely, emphasizing thoroughness, determination, intelligent co-operation, and above all, clean sport. It is a pleasure to chronicle the success of a team whose principles are to win only by fair means, and to remember, first, last and all the time that its members are gentlemen, who concede to their opponents adherence to the same standards of honor and sportsmanship which they themselves try to maintain. Of the nine games played with prominent New York and New Jersey schools only one (Trinity, New York) was lost.

Newark Academy's team certainly had one characteristic that should be common to all teams, and that was sand; and while this quality did not win many games besides the one over the Stevens Preparatory (12-6) it kept the opponents' scores down. Morristown (0-6), Newark High (5-6) and Mount Pleasant (0-5) each scored but once and the two games with East Orange High resulted in scores of 0-0 and 2-10. The most decisive defeats were those received from the strong teams of Montclair High (0-17) and Princeton Preparatory (0-16) both of which outweighed the Newark Academy men.

East Orange High, Montclair High, Newark High, Princeton Preparatory all turned out average elevens. The kicking of Geiger was a strong feature of East Orange High School's play, while for Montclair High, Captain Bradford and Reynolds, halves, and Cairns, full-back, did the best work.

PHILADELPHIA NOT SLOW IN SPORT.

No better refutation of that over-worked slur could be found than in the study of its enterprise and excellence in sport, in which regard it far excels any city in this country, particularly in this line of activity in its many excellent schools. Of the several interscholastic organizations, the Inter-Academic is the most prominent, the results in which in football were:

Penn Charter won 4, tied 1.
Germantown won 4, tied 1.
Haverford Grammar won 3, lost 2.
De Lancey won 2, lost 3.
Cheltenham won 1, lost 5.
Episcopal won 0, lost 4.

The principal games were Penn Charter-Haverford, 48-0; Germantown-Delancey, 11-0; Haverford-Delancey, 29-2; Germantown-Penn Charter, 11-11; Germantown-Haverford, 28-0; Penn Charter-Delancey, 40-0.

Penn Charter seemed to have the best eleven and perhaps ought to have won the championship. It had the necessary weight and was splendidly drilled in a few powerful plays. Its chief handicap lay in its severe schedule, which made it hard to keep the men in condition. Among its best players were the tackles, Captain Jones and Donaldson; Richards, guard; Roper, half, and Vetterlien, full-back.

Germantown, with traditional pluck, overcame a most discouraging outlook and developed a strong eleven. Its best men were Glassey and Mason, tackles; Evans, quarter; Captain Lea, half, and Sheble, full-back.

Haverford's strength lay in its back field, which was good, Sayen doing particularly well. The line was of average strength, the team, as a whole, being fair.

De Lancey seemed to lack proper spirit last season for some reason or other, and did not respond at all to the efforts of its capable director. Its prospects at the outset were good, its coach one of the best in this country, and there is little excuse for the outcome of its games. Captain Rulon-Miller, full-back, deserves all praise for his perseverance, as well as for the excellence of his personal play. Other good men were Warwick, the best scholastic end in Philadelphia; Rhodes, tackle; S. Brock, guard, and Brooke, center.

For Episcopal Academy, Large's play at half was the redeeming feature.

The Swarthmore Preparatory School team was one of the best school elevens in or near Philadelphia. The team was very light, yet won all its games save that with Penn Charter, which it lost by 6-11. Of the team, Terrell,

Coxe, Crowell, and Smith did the strongest work, but all the men deserve much praise, for without co-operation, so light an eleven could never have made the best record ever credited a Swarthmore Preparatory team.

There were also good teams at Central High (the latter losing to Penn Charter by 6-18 in a hard, well-fought game), Central Manual Training, and Drexel Institute.

OTHER PENNSYLVANIA TEAMS.

THERE were some of exceptional ability, notably Hill School and Mercersburg. Hill was fortunate in merging the star work of Bowman, Long, Shevlin, Spencer, *et al*, into a quality of team play rarely seen on a school eleven. The average weight was 153 pounds, the men well balanced, of unusual experience and individual capacity, enjoying a thorough knowledge of first principles, and it is no wonder they went through the season without being scored on. The summary: against Central High (Philadelphia), 35-0; Pennington, 41-0; Princeton Preparatory, 28-0; Germantown "Spiders," 6-0; Penn Charter, 18-0; Princeton 1904, 11-0; Royersford, 24-0; Lawrenceville, 24-0; total, 187-0.

Bowman is one of the best players ever seen on a school team. Fierce in attack, a skilled dodger, speedy runner, good punter, he is everywhere and in every play. Long is also an ideal scholastic back, being a fast sprinter and quick dodger. Shevlin is a coming player as are Spencer, Humbird and several others.

Mercersburg also turned out the best team in its history. It beat the Princeton freshmen (which had defeated Yale 1904, 17-6) by 34-0, and the second teams of Dickinson College, Franklin and Marshall and the Carlisle Indians by 36-0, 41-0 and 12-0 respectively. It also beat Lawrenceville 22-5. Of the eleven Glass, Delancy, O'Neill and Weir were most prominent, although all the men did efficient work.

Shady Side Academy, Pittsburg, has played excellent football this season, scoring notable victories over Kiskeminitas, Pittsburg High and others, but it has even more cause for self-congratulation in the clean, high-minded sportsmanship maintained in the midst of the worst atmosphere of professionalism in the United States. Ahl and Bauersmith in the back field were the strongest individual players.

SOME WESTERN TEAMS.

It was a pleasure to see the University School (of Cleveland, O.) eleven in the East last autumn. They played an excellent game

against Groton (5-6) and were to have played Hotchkiss and Shady Side but the arrangements fell through. The star of the team was Bolton. His kicking, in all developments, was admirable. Carter was a fierce runner, a deadly tackler and an excellent interferer. Raymond and Hardee were also powerful aids in bringing about so successful an outcome of the season's work.

Chicago and vicinity had several good teams, notably the Morgan Park High, Princeton-Yale School, University School, Northwestern Military and Lake Forest Academy elevens.

University School won all its games save one.

Northwestern won its games, scoring 157 points to 11 and closing the best season the Academy ever had. Lake Forest was also quite as successful, defeating all of its eight opponents by 219 to 5.



C. P. JONES,
SOMERVILLE (MASS.),
HIGH SCHOOL.



RAYMOND OVESON,
HOTCHKISS SCHOOL.

Smith Academy, of St. Louis, was represented by an unusually light eleven last autumn hardly up to its former standards.

The Duluth Central High School team seems to have a good claim to leadership in its section, having beaten Ashland (17-0), St. Cloud High and other teams of the Northwestern district. It was not scored upon during the season.

THE PACIFIC COAST.

THERE are twenty-three schools in the Academic League of California, three of which were unusually strong, viz.: the Lowell High and Lick Schools of San Francisco and the Berkeley High School. The Lowell High was the winner of the final game.

CHARLES E. PATTERSON.

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